

Away Down East in Maine.

EDITOR AMERICAN FARMER: I received a copy of your paper, and I like the plain way of explaining about farm-I am away Down East on a farm near the Penobscot River, where the snow has covered the ground 100 days the past Winter without a bare spot. I read the Wilson Bill talk and hard times and cheap wheat and wool topics with interest. | years. Among the farmers here the low prices and hard times are not so much felt. Our mixed crops, with hay predominating, were fairly good last year and prices are up to the average. Although the scare and Wilson Bill has sent wool down to cents, hay \$14 per ton, and straw \$8.

The Wilson Bill will strike the Maine farmer hard on potatoes, especially in Aroostook County, and the lumber business in northern Maine would receive a hard blow. Then, there is the lime business near by here, and granite quarries in town, and in all other industries the outlook is not so promising as in former years. Then, there are wood, hay, and eggs, etc. If farmers could be protected just a little it would encourage, although the odds in the way of living and cheaper labor of the Provinces would be hard to offset here with their thousands of acres of virgin mmenced. I was going to tell some of the small matters in farming Down East and how different farms look here from those in Maryland and Delaware, when we, with the rest of the boys, used to follow the sea and go up the Chesapeake Bay and Delaware River some 40 years

It might be supposed that poultry in the cold and snow of Maine, confined without a spot of bare ground for 100 days, would not be very profitable. But our week's record commencing March 18 is 71, 54, 50, 54, 53, 56, 42 eggs for 87 hens. For January, 796 eggs; February, 811 eggs. Price, 24 cents to 14 cents now. Our feed has been four bushels of Western wheat at 75 cents per bushel; for an extra touch, cornmeal and shorts scalded in the morning, and oats, barley, and buckwheat scattered in straw in their pens, with an occasional touch up of Bowker's bone and animal meal; plenty of pounded clam shell and gravel, with milk and water all the time. We had chickens come out March 10. The double combs, as some call the



rose comb leghorns, are the most in favor months old. They are quick motioned the move hot or cold.

after locating one farm you can pick out pears half as large as a man's head, and the adjoining farm, and so on, by the other fruit in proportion. line fences and highway road. The range; No. 3 third range, and so on. cents; eggs, 10 cents to 30 cents.

first road that was built through the woods by the first settlers; for instance, my farm is on the No. 8 third range lot from the turnpike line. On both sides of this turnpike road the lots run the same until they come to lots surveyed differently, then the jilgore and flat iron erally are too indolent to try anything same until they come to lots surveyed pieces were claimed by the one that was lucky enough to hold quiet possession 20

So after noticing how the lots run, you could locate the farm pretty accurately by the buildings, orchard, fences, and pasture. But as seen from the Delaware and other southern places, everything seemed to be chaos or chance; there were 18 cents, oats are 45 cents, potatoes 50 not fences enough to get an inkling how the lots ran, or where the highway travel was, and some peach orchards were quite a distance from a house, and a hay stack was away off where nobody lived; then a big barn and a small house, then a big house and small barn, and tall trees with limbs all pointing up. Some farmers were a-haying in June, away off where there were no buildings; and a big piece of corn was away off in the woods-it would be called so here. But that was the way farms looked then. I suppose they did start in with uniform lots with first and second ranges and 100 acre lots, and some took one, two or three lots, same as here. But I could not seem to get started to trace along farms the are hopeful. This, however, was not what I was going to write about when I commenced. I was going to tell some of the good soil and climate along the Delaware River or Chesapeake, but I should never get used to hog and hominy. That is something Down Easters don't have. I was going to say that I hear by the way of the Department of Agriculture from every County in the United States once a month. I have been crop reporter for several years for Waldo County. And with such good information from all over the country as to the coming prospect and prices, farmers can rely on future crops with almost a certainty for a fair price, by changing his crops, on the farms in Maine. Although we don't have those broad acres and great fields of wheat and corn,

Oregon.

Stockton Spring, Me.

we study to make everything count in

our short season, and come out smiling

with our larder well filled with blessings,

and enjoy our share of the good things

of Mother Earth, according to the efforts

put forth.-FREEMAN PARTRIDGE,

EDITOR AMERICAN FARMER: Such delightful weather as we are having, makes me long to tell to my Eastern cousins the many beauties of our climate and soil. The peach, apricot, plum, prune, and other varieties of fruit are in bloom, and the air is heavy with the perfume of many flowers.

Seeding is about done and indications are that we will have a bountiful harvest. The fruit crop will more than be double what it was last year. If the residents of some of the blizzard-stricken regions east of the Rockies could only be transported in a single night from their present abode to this section of country, they could then realize what a difference be- oughly done, as a rule, than for some tween life in this section and any other years past.

A few peaches bloom here in February, but the bulk of them are only now coming into blossom.

This particular locality is the most favored spot on the Pacific Slope for several reasons. It is simply perfect as here, Ours commenced to lay at five to climate; none better. Good water, and smart as a steel trap, and always on the move hot or cold.

We wood handy and cheap, plenty of grass, and out range for stock. Perfect conditions for the proper maturing of all What I was going to say about farms kinds of fruit and vegetables. Beets was that in Maine anyone acquainted weighing 51 pounds have been grown could about always tell by the location here, plums weighing one-quarter pound of the building what field and pasture each, peaches measuring eight and a half belong with the farm by the lane or way inches in circumference, prunes measurleading from the barn or building. And ing 6½ x 7½ inches in circumference, and ness, but it is now thought that the

No irrigation necessary. Beef cattle way the lots of land run here, the lots commence at the shore and run back so \$9; three years, \$13. Milch cows, from has heretofore been taken in the production of the lots of land run back so \$10 three years, far and so wide; then comes No. 2 second \$12 to \$20 for good ones. Butter, 25

In some cases here, lots are run from the Anyone can live here very cheaply. A good many cattle are being ied, and back again. These people say that this the seed.

There is no Government land, but land The 25 cents per month per 100 pounds is one of the healthiest places that they can be had from \$4.50 to \$100 per acre. Some good places back from town can be had cheap.

We are on the line of the Southern Pacific Railroad, 219 miles south of Portland and 500 miles from San Francisco, which gives us good market facilities for all of our surplus produce.

There is a vast amount of mineral wealth here that is as yet undeveloped, but a great deal of prospecting is being done, and the near future will see regular mining boom strike this country. An immense steam hydraulic placer mining plant has been put in operation two miles below town that works well, but is now closed down for the purpose of enlarging the sluice boxes. The company have a large amount of river bar land that they will work. There are preparations being made to put in several other plants of like nature.

What we need here to develop this country is a few men of moderate means and push who are not afraid to invest their money where there is a chance to out of the old beaten paths their forefathers trod. A living can be made too easily, and they have no ambition to get to the top of the ladder if it takes any exertion. There are plenty of chances here to make money by properly invest-



ing it now; but it is not a very good country for a man with nothing to come

There are business chances here. An opening for a good boot and shoe maker, a cannery and fruit evaporator, hardware store, furniture store, sorghum fac-

tory, and other enterprises.

That this is a good place to live will Go West, Young Man, go West to a be proven by the fact that there is not an empty house in town, and applica-tions are made almost daily for houses to rent. We have no saloon and three churches, a 50-barrel flouring mill, etc. Sawmill two miles from town; lumber, rough, \$8 per M.

If you want a home in one of the most delightful and healthy spots on earth, come to Myrtle Creek, the Orchard City. You can always find something good to eat at the Overland Hotel. -W. F. FOGLE, Myrtle Creek, Ore.

Northeastern Kansas.

EDITOR AMERICAN FARMER: Upon averaging up weather conditions for the past Winter, we find it has been an exceptionally fine one. The saying "December's as pleasant as May" have applied to many days in that month of 1893.

Jan. 16 and 17 plows and stalk cutters were running, but the 19th brought an all-day's rain, which was followed by cold, disagreeable weather, and on the 23d a considerable blizzard. The next morning brought a temperature 14 degrees below zero, which was the coldest all. Some of the farmers have only a of the Winter

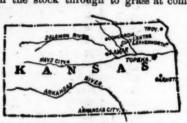
Again fine weather predominated throughout February, ushering in a very lamb-like March, though the 16 inches of frozen earth was not thawed and the ground in proper condition for farming until the 10th of the month, when stalk cutters were again started, and three days later oat sowing was in full progress, with the soil in most excellent condition. By the 20th the bulk of the acreage had been finished up in could raise almost any kind and variety good shape, with the ground in better of vegetables, grain, and fruit trees, and condition and the cultivation more thor-

The weather almost immediately turned cold, culminating on the 25th in a temperature 25 degrees below the freezing point, and for several days thereafter much of the seed was encased

in frozen earth. April weather has been more favorable thus far, and upon examination today (April 7) I found the most forward plants just making their appearance above ground, and while there is unmistakable evidence that a small per cent. of the seed has been destroyed, there are also indications of a fair stand, though a good rain would be most acceptable.

The cold snap caused much uneasiprospective apple crop is injured but little, if at all. This is true of wheat also, though prevailing prices have well all returned, and those that didn't re-

Institute report published in THE AMERI-CAN FARMER for March 15) advance My in price, which feeders claim should occur to enable them to feed at a living profit, does not appear to be forthcoming, and some, after having fed several months, are making a "sweeping reduction" in rations, having decided to run the stock through to grass at com-



paratively light expense, hoping for improved market conditions later on.

And this notwithstanding the fact

that whatever may be said of certain other "powers that be," an overruling providence has certainly provided natural conditions favorable to the stockmen of this section at least. The Winter, mild and dry, has been one of the very best for feeding with corn averaging about 25 cents per bushel, and roughness abundant and cheap. There seems to be a quite general feeling as of a loose screw somewhere amid the vitals of the body politic.

The County is full of horses, and when occasional sales are made they are at prices that "defy competition." The crop of colts one year hence will doubtless be a comparatively light one. Those who have been breeding for quantity, with quality as a secondary consideration are disgusted and going to quit, but this will make it all the better for those who stay. It would seem to be an opportune time to sacrifice inferior breeding animals, and take a long stride in the In this, as in most other branches of

SOUTHWESTERN NEBRASKA.

Healthy Place, and not be an In-

EDITOR AMERICAN FARMER: I can say that I do not know of any paper published in any State which goes beyond THE AMERICAN FARMER. It gives good information from all parts of the United States, and the suggestions of the people of different methods of farming, stock raising, poultry raising, etc. In your paper of March 15, 1894, I saw some statements from J. L., Vice-President Florida State Alliance, Rye, Fla., of "A Sunny Land" in regard to the health, climate, etc.

I think that the health and climate here is similar as down there. But I suppose the Winters are more severe in the North than in the South, but the Summers are the hottest there. Our Summers being somewhat cool from the showers of rain that pass over. This being midway in the Temperate Zone, escapes the torrid winds of the Gulf and the severity of the Winters of Manitoba. The stock, horses, cattle, and sheep, can live here with very little or no feed at small stack of straw and no corn and no shelter, for we were dried out last year, 1893, and did not raise much but hay, and that only in places. There it was plentiful. The people let the stock out on the prairies and on the creeks this Winter and let them run, just keeping watch so they would not wander off too

All we need here to raise a good crop is rain. If we could get enough rain we all Northern grown vegetation. The soil is a dark, sandy loam, light, and easy



of cultivation, rich and productive. The pores of the subsoil are found running perpendicular with the surface, which readily carries off all surface water, as well as absorbs moisture from below.

Some of the people a few years ago became disgusted at a partial failure of our crops, and went as far west as the Pacific Coast and as far east as Virginia and as far south as Oklahoma, and I am glad to say that they nearly turn want to, and they will if they can. has heretofore been taken in the produc-tion of this crop.

A good many cattle are being fed, and

I don't suppose that they found a better place than here, and if they had they wouldn't have been so anxious to come

weight (not per head, as stated in our found on their tour over the United

My father says that he resided in Elkhart County, Ind., about 14 years, and it took all he made to pay the doctor bill and expenses. Then he started with a team and covered wagon to seek a better place, and he stopped in Illinois where he stayed nearly five years, but sickness, and rent being so high, for he had no land of his own, he did not make anything. He concluded he would try and seek a better place than there; he started again with a team and covered wagon for Red Willow County, Neb. He then moved to Dundy County, Neb. In his great tour from Indiana and Illinois to Nebraska, he did not find a more healthful climate than here.

When you travel with a team and wagon you can see everything along the roadside. We have lived in Nebraska it will be 10 years next Fall, and during that time we have not had a doctor in the house, and there are six of us at home nearly all of the time. "How is that for health?" The rest of the people are nearly the same. Good health s above all things, even money.

Many of those who die here are invalids from the sickly parts of the United States, who come out here for their health, and after they are out here awhile they improve greatly, and many of them get well.

I would advise some of those who are homeless and have to rent to come West to Dundy County and seek homes while the land can be had, as the land gets being taken up every year by the people who come out for their health.

In your issue of March 1, 1894, is a request from W. O. Rosecrans, of Cleardale, Kan., for all the writers of this paper to write the truth. I have the same opinion as W. O. Rosecrans in regard to the direction of improvement in quality. above statement. Mr. Rosecrans says that "We are apt to be too enthusiastic in farming or stock growing, there is still the praises of our own State or County, room at the top.—G. T. P., Oneida, to its great detriment." And I believe to its great detriment." And I believe that statement, for some want their State or County to surpass others,-MARTIN A. BAUGHMAN, Max, Neb.

North Alabama.

may think of seeking homes in the the East about 1890. South, I will, with your consent, briefly describe one of the many places here for which nature has done much and man but little.

North Alabama is a rough, mountainous country. Much of the land is too Fla. They are said to occur throughout rough and rocky to ever be utilized by the farmer; but the land that can be cultivated is good, mostly level, and free During the same months specimens were from rock. The valleys are rich and well adapted to general farming, and the | Charles County, Md., and immediate exmountain lands cannot be excelled for fruits and vegetables.

Our climate is a compromise between that of Maine and Florida-neither too trees are infested in this locality. Specihot nor too cold for health and comfort. In some of our lowest valleys there is festation which we have never before considerable sickness some years, but in the higher valleys, where the drainage is good, there is but little sickness, and expressed himself as of the opinion that a healthier place cannot be found on the globe than on our mountain-tops. Society is not as good as could be de-

sired, but is improving. Our school system is very imperfect; good schools are "few and far between," but from present indications this will not be the case many years longer. Our people are becoming aroused to the importance of I am a Northern man, and am living

in a mountain settlement composed largely of Northern people. We have an excellent school, with an average attendance for nine months in the year of nearly 150 scholars. Our teachers, four in number, are all from the North. Tuition \$1 per month.

Our location is about five miles north of Woodville, a little station on the Memphis & Charleston Railroad. Unimproved land can be bought near our school at from \$5 to \$20 per acre. Our elevation above the valley is nearly 1,000 feet, and 2,000 feet above sea level.

North Alabama and parts of several adjoining States is rich in minerals, and in the near future this will surely become a great manufacturing region, unless the free traders become too

strong. In conclusion, I will say that I am one of the "old boys" that wore the blue during the "late unpleasantness," and that I will answer letters of inquiry from any of my old comrades who inclose stamps. I would make the same offer to all home seekers, but fear that by so doing I would get a bigger job on my hands than I could manage.—J. O. CLARK, Co. D, 47th Ill., Woodville.

With good care and cultivation nearly by which this spread can be limited. any kind of nut trees can be grown from

THE SCALE INSECT.

and Fearful Enemy to the Eastern Fruit Grower.

Bulletin, Department of Agri-



CCORDING to the most trustworthy authority, the San Jose Scale was first brought to California from Chile on trees received by Mr. James Lick, about

1870. Fruit shippers first noticed it in 1873 at San Jose, from which fact the popular name of the insect is derived. It spread rapidly until 1880, when Prof. J. H. Comstock, formerly Entomologist to this Department, collected specimens in Santa Clara County, and in the annual report of the Department for that year described it scientifically as Aspidiotus perniciosus. The specific name was given to it for the reason that Prof. Comstock considered it to be the most pernicious scale insect known in this country. It swarmed in countless numbers upon the trees in certain orchards, and infested all the deciduous fruits grown in California, except the apricot and Black Tartarian cherry. In the course of 12 years the insect spread through all the fruit growing regions of California, through Oregon, and into the State of Washington. It is higher in price, and the best land is known as the worst insect pest of deciduous fruit trees on the Pacific Coast. and has caused great pecuniary loss.

Many crops of fruit have been ruined, and thousands of trees have been killed.

OCCURRENCES OF THE SCALE EAST OF THE ROCKY MOUNTAINS.

In 1892 the insect was found in the ricinity of Las Cruces, N. M., upon apple, pear, plum, peach, quince, and rose. It had been brought into New Mexico upon young trees from California. pears affected by the insect were received at the Department from Charlottesville, small orchard there was badly infested, is not familiar with their appearance the EDITOR AMERICAN FARMER: For the insect having probably been intro- existence of healthy living scales on the the benefit of any of your readers who duced upon nursery stock purchased in

During March, 1894, specimens were received from the Florida State Agricultural Experiment Station, with the statement that they had been sent in by correspondents at De Funiak Springs, a 30-acre orchard, and to have been imported from California about 1890. brought to this office from Riverside. amination by an assistant in the Division, who was sent to the spot, showed that more than 1,000 peach and apple mens received showed a degree of inseen. The owner stated that the scales were first noticed three years ago, and

the insect was brought into this orchard on nursery stock purchased from a New Jersey dealer.

PROBABILITIES OF ITS OCCURRENCE

ELSEWHERE. If, as we have little doubt, the insect was first introduced into the Charlottesville and Riverside orchards upon nursery stock purchased from Eastern dealers between 1887 and 1890, the probabilities are strong that other stock purchased from the same dealers at about the same time was also infested. It is not necessary that the stock purchased from these Eastern dealers should itself have come from California, since Eastern stock in the nursery may have become infested from California stock in the immediate neighborhood. The scale, therefore, without much doubt, exists in other parts of the East, and measures have been taken by the Department to ascertain all the points at which it occurs. The importance of such knowledge can hardly be exaggerated. The insect spreads rapidly, for a scale insect, and is

the most dangerous scale known. It is inconspicuous, and will hardly be noticed by the average fruit grower until it has become very abundant-so much so, in fact, as to practically incrust the bark. Remaining unnoticed in any one locality, it is a constant and immediate menace to the fruit growing interests for many miles around. The constant portage of nursery stock all through the fruit growing States of the East, from south to north and from north to south from east to west and from west to east. affords the most favorable opportunities for the spread of the insect, and there exist at present absolutely no restrictions

The San Jose Scale belongs to the same group of scale insects-the Dias-

pinse, or armored scales-to which the common and well-known Oyster-shell Bark louse of the apple belongs. It differs from this species, and in fact from all other Eastern species found upon deciduous fruit trees, in that the scale is perfectly round, or at most very slightly elongated or irregular. It is flat, pressed close to the bark, resembles the bark of the twigs in color, and when fully grown is about one-eighth of an inch in diameter. At or near the middle of each scale is a small, round, slightly elongated black point; or this point may sometimes appear yellowish. The full-grown scale.



enlarged, is shown at Fib. 1b.

Fig. 1.—San Jose Scale: a, pear, moderately fn-fested—natural size; b, female scale—en-larged. (Original.)

When occurring upon the bark of the wigs or leaves and in large numbers, the scales lie close to each other, frequently overlapping, and are at such times difficult to distinguish without a magnifying glass. The general appearance which they present is of a grayish, very slightly roughened scurfy deposit. (See Fig. 2.)

The natural rich reddish color of the limbs of the peach and apple is quite obscured when these trees are thickly infested, and they have then every appearance of being coated with lime or ashes. When the scales are crushed by In the Summer of 1893 specimens of scraping, a yellowish oily liquid will appear, resulting from the crushing of the soft vellow insects beneath the scales, Va., and an investigation showed that a and this will at once indicate to one who



Fig. 2.—San Jose Scale: Apple branch, with scales in situ—natural size; enlarged scales above, at left. (Original.)

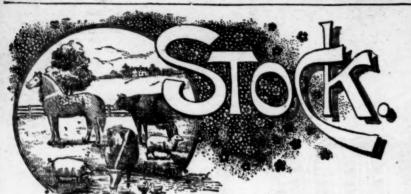
They are easily scraped off with the finger nail, and the bark beneath them will be seen to be darker in color. The natural color of the bark is also somewhat changed, as will be seen by comparing the places from which the scales have been removed with the spots upon which the scales do not occur. The outlines of the removed scales will be noticed upon the bark, and the circumference is frequently changed in color. becoming somewhat purplish. Where the scales do not occur so thickly they are more perceptible, and upon young, reddish twigs the contrast is quite noticeable, as the scales there appear light gray. The younger and smaller scales are darker in color than the older and larger ones, and sometimes appear quite black, while the still younger ones are vellowish.



Fig. 3.—San Jose Scale: a, young larva—greatly enlarged; b, antenna of same—still more enlarged. (Original.)

During Winter the insect is to be found in the half-grown or nearly fullgrown condition. The young begin to natch and to crawl from under the female scales shortly after the trees leaf out, and from this time through the Summer there is a constant succession of

(Continued on eighth page.)

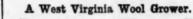


EDITOR AMERICAN FARMER: Will you please tell me how to raise calves with oilmeal, how to feed it, and what to feed with

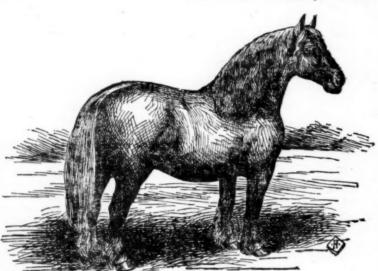
What is the difference between the "old process" and the "new process" meal?— GEORGE CAREY, East Arlington, Vt.

Careful experiments made at the Iowa and Wisconsin stations indicate that the best results were obtained by feeding calves 10 pounds of skim milk one and | whole fabrication is a mere theory minus one-half pounds of flaxseed meal per day. the least argument; take his first argu-Somewhat greater gains were made by ment on wool, when he says a child first feeding whole milk, but not enough to pay for the difference between the values of whole and skim-milk. Estimating I think if Mr. Munnikhuveen had risited the whole milk at 874 cents, and the the Australia Building at the World's skim at 15 cents per 100 pounds, and Fair and examined the quality of their the flaxseed meal at 3½ cents a pound, wool and listened to their arguments the food cost of the gain in flesh was 7.6 and heard them say, as many did, that cents per pound for the whole-milk lot, they did not want a better fortune offered and 5 cents per pound for the skim lot. them than to supply the American Shorthorns and Holsteins were tried, the market with wool at 12½ cents a pound, Holsteins making the larger gain. At he would have been able to draw some the Wisconsin Station calves fed on a conclusions as to the difference between a ration of skim-milk, linseed meal and protective tariff and ad valorem duty, ground oats averaged a gain of one and would be one of the last men to say pound for every 13 pounds of milk, that a protective tariff is a tax. It's as one-half pound of meal, and one-third clear to me as sunshine that when I sell pound of oats. Skim-milk which had 100 pounds of wool for \$25 that I have been curdled gave nearly as good results a better profit than I would have if I

out of the grain by hydraulic presses, six pounds, hence, six 11's are 66; that



EDITOR AMERICAN FARMER: Your live and magnificent Protectionist paper is a very welcome visitor in this West Virginia home. I only wish it came twice a week instead of twice a month. Your reasonings on the tariff question are superb as well as instructive. I look upon Mr. Wm. Munnikhuysen's article as the weakest of weak arguments; the whole and skim-milk. Estimating I think if Mr. Munnikhuysen had visited sold it for \$12.50. It is equally evident In the "old process" the oil is squeezed that when a suit of clothes only weighs and in the "new process" it is extracted by benzine—Editor American my sale of 100 pounds of wool at \$25 have \$9 left? Certainly. Sixteen and



BROWN DUCHESS. Owners, Burgess Bros., Wenons, Ill.

Leg in Cattle.

EDITOR AMERICAN FARMER: I saw something in your valuable paper about black leg | 121 cents, we will be compelled to sell in cattle. This is generally confined to calves between six and 18 months old, but adult weel only brings us 312 50 and cortainly animals are not exempt from it. As a rule, it affects the best animals, and those growing the fastest. It generally occurs when they have been changed from comparatively poor food to improved diet. Ill-growing, lean, and unthrifty animals are seldom attacked. When it does occur in the last named class, the stomach will be found to contain a mass of indigestible matter. Sudden changes of temperature, cold nights after warm days, a cold, rainy night after a spell of mild weather. have also been found to be exciting causes.

Animals tied up in the stable and not exposed the weather are sometim Then the cause must be sought for among the first named.—GEO. C. GUSTAV, Brewster, N. Y.

Black leg is now believed to be confined to low lying grassy situations, and to be caused by infection. If taken in time the attack can be cured by giving the animal from four to 16 ounces of Epsom salts, followed by dram doses of quinine four or five times a day. Inoculation has been tried in several localities with success.—Editor American FARMER.

SUBSCRIPTION HERD STAKES.

Revision of the Conditions of the Rhode Island Association.

Yielding to a generally-expressed wish of cattlemen, the Rhode Island State Fair Association has made the following revised conditions for the guaranteed

subscription herd stakes: The amount of each stake, \$1,000, to be guaranteed by the Rhode Island State Fair Association, and will be divided into four premiums as follows: 1st. \$500 2d, \$250; 3d, \$150; 4th, \$100. Entrance see five per cent. First payment June 4, \$10; Second payment July 23, \$15; Final payment Sept. 3, \$25, when subscribers must give names and registered numbers of each member of their herd. Five per cent. additional deducted from the premium winners. Open to the world. Stakes close Monday, June 4, at 11 p. m. All entries must be registered or eligible for registration in the herd book of the breed to which they belong, and must be the bona-fide

property of nominator. Six herds in each class must enter to fill. A herd to consist of seven animals, namely-one bull, two years old or over; three cows, three years old or over; one heifer, two years old and under three: one heifer, one year old and under two: one calf, male or female, under one year quested to send for new blank forms to

The ages of animals comprising competing herds will be reckoned from Sept. 3 of the year calved, thus corresponding with our specified date to name and make final payment of entries.

nine are 25. Hence, if the Wilson Bill permits Australia to sell wool here at wool only brings us \$12.50, and certainly instead of having \$9 left we would be \$3.50 in debt on the \$16 suit. I say, send on THE AMERICAN FARMER. The West Virginia wool growers want it, and value your arguments. I am as sure as anything that if Mr. Munnikhuysen could lay aside prejudice and look at protection as it is he would be able to see that a protective tariff taxes only Australian wool and by so doing keeps it out of our markets, and saves to us a home market at 25 cents instead of 121 cents, as will be the case when the Wilson Bill becomes a law. Experience is a dear school, as the wool growers will find out if the so-called Wilson Bill becomes a law .- F. M. HUFFMAN, Marquess, W. Va.

Shepherds in Italy.

The first annual report of the United States Commissioner of Labor thus portrays the conditions, wages, etc., of shep-

herds in Italy:
"Condition—Lives in haystack-like read; possesses but a slight degree of health and tends to perpetuate hardiness intelligence.

"Diet-Breakfast, black bread, oil. water; dinner, black bread, oil, water; supper, black bread, oil, water. This meager and monotonous diet is varied at infrequent intervals by a very small piece tion of the economy of warm houses of bacon, salt pork or macaroni, an onion or a little funnochio; on great fete days by a little wine.

"Earnings at seven cents a day, 825.55.

"Cost of living for the year-Bread, \$14.60; oil, \$5.47; other food supplies, \$1.82; elothing, \$3.66.

"Expenditures, \$25.55. " Earnings, \$25.55."

Holstein-Friesian Association.

At the annual meeting of the Holstein-Friesian Association of America, held at Buffalo, N. Y., March 21, last, Mr. Thomas B. Wales failed of re-election as Secretary, and was succeeded by Mr. F. L. Houghton, widely known as the editor of the Holstein-Friesian Register, of Brattleboro, Vt., to which place the offices of the Association will be removed from Boston on May 1, next, and that all correspondence should be so addressed at that time. Breeders are rebe hereafter used.

Carriage Catalogue.

The Alliance Carriage Co., of Cincinnati, O. will send their complete catalogue of vehicles and harness, showing over 100 different styles Subscribers held only for the amounts of vehicles, from a road cart or farm wagon to

SHEEP AND WOOL.

Shearings.

It seems that in South Dakota, while many are selling the flocks and quit-ting the business, these same flocks, especially the ewes, are being transferred to other hands—to younger men with more faith in the future of sheep, who will become the future flockmen of the

Bad as the outlook for flocks is in the eyes of old, experienced flockmasters, there is to be found a class of young men who believe they see their way clear to embark in the business of keeping flocks. This is a most hopeful indication of the perpetuity of the sheep industry. It may be a matter of interest to know how these young men figure on a profit at present prices and prospects. In all probability the young men have a faith that reaches beyond the vale into the future.

The Montana wool growers are adjusting rates of labor to meet the possible free wool law. At a recent convention of wool growers it was agreed that flockmasters should pay only six cents a head with board, or seven cents where shearers boarded themselves. The wages of herders was partly settled at \$25 to \$40 per month, though a few insisted that further reduction would have to be made of from \$5 to \$10 per month before Montana could successfully compete with Texas, where Mexicans work for very low wages, and their living expenses are only a trifle, camparatively.

Geo. W. Franklin, of Atlantic, Iowa, thinks bran will answer for roots in the wintering of sheep, and says: "We have been experimenting to ascertain whether we could gain as much on a ration of which the principal ingredient is bran as one consisting partly of roots. The results of our investigations are for the most part satisfactory." We should be glad to have the experience of such of our readers who have been feeling their way along these lines. It has been our opinion for years that bran did not receive the consideration it deserved as component part of the sheep's ration.

THE AMERICAN FARMER says: "Truly, flocks and flockmen are being tried as by fire in this country, but the ordeal will have a beneficial effect upon the future character of the flocks and the economics of the flock raisers."

Judging from the tone of the trade journals of England, the manufacturers of that country are deeply interested in the passage of the Wilson Bill. They of them are earning money just as hard want the Wilson law, if it should be so, to go into effect at once, and turn loose the immense stocks now in the custom houses upon the American markets.

Sometimes we are very much disgains to the sheep industry of this farmer as for any profession I know of. country.

THE AMERICAN FARMER congratulates every sheepman who has adopted more care in handling his flock, as well as the thrifty, provident farmer who long since discovered that it was strict economy to furnish shelters warm and commodious that can be regulated to the comfort and security of his sheep. It may be all right enough to allow the animals to find natural shelters where such are to be found. It will do to trust to good luck(?) in the South, where Winter has few, if any, terrors for the stockman but in the North, where Winter is reality, and the exception not the rule, it is certainly the part of humanity, at least, to make even sheep comfortable. By some very successful sheep raisers it is claimed that shelters make the stock hovel: leads a solitary life; cannot tender; that exposure gives vigorous This may all be, but heat has to be se cured either by feed or boards and shingles, and there can be no question of which is the cheapest way of getting it. Human civilization has not a queswhen the storms of Winter come. As well advocate the theory that men and women should live out of doors to get hardiness. The first consideration of the stockman is constitution; but that very important function need not be expended in trying to keep warm. Let it be the test of constitution to develop the most and best meat in the least time and at the least expense of feed; to grow the most and best wool: to reproduce their kind uniformly and true to type. That is enough for constitution.

Lung Worms in Sheep.

This disease is common in a flock that uses the water from a pond or that feeds on wet land. The symptoms of the disease are swelling under the throat, due to poorness of the blood, by reason of the weakening effect of the parasites; a dry cough, and thin, white skin. The skin becomes bare of wool in places, and the sheep have a drawn-up face that is expressive of suffering and misery. If the flock has not been too much weakened, the disease may be checked by the use of must be continued for a month until the system is saturated by it, and it is the

of equal parts of sulphate of iron and gentian root finely ground. This may be given in a little meal or bran moistened. It is found that sheep that are kept in strong, vigorous vitality are far less liable, or perhaps susceptible, to lungworm attacks. It is usually the lambs that succeed the succeeding the strong worm attacks. that succumb to lung worms, and if lambs are daily fed a little dry sweet

yield to such attacks. It is well known that healthy pastures may become unhealthy when affected sheep are placed upon them, or the ma-nure from diseased sheep are scattered

grain feed, they rarely are attacked or

over them. Too little is known of the life history of this worm to say whether the entire existence is spent in the sheep or whether there is a variety of stages through which it must pass before it enters the sheep. It is quite enough for the flock owner to keep the sheep in strong condition and keep the pastures and water supplies above suspicion.

A Michigan Sheep Letter Worth Read-

A. H. Foster, Allegan, Mich., in regard to sheep, says: They are thriving well, and do not seem to be any the worse for the looked-for free wool. My sheep are in better shape than ever before. I do not expect many lambs before about March 10. Four ewes have running by their sides seven fine lambs. I expect the flock will hold out this well or better right through to the last. I have some very flattering letters from customers of this year. I am giving the and they seem to appreciate it. Yesterday I was out trying to find some good grade ewes for a customer in Iowa. After looking around and finding nothing but stunted things, my sheep looked bigger and better than ever before when I came home. I find a great many who complain that free wool is keeping them out of the market. I give a letter from what seems to be a first-class farmer of Iowa, who no doubt has a fine farm and is considered well to do. He writes Feb. 21, 1894:

DEAR SIR: I am sorry to inform you that, owing to financial reasons, I am obliged to give up ordering any sheep of you this sea-

This is a fair sample of a great many this Winter, which goes to show that cropped. they did not make any last year. I look and hope for better times the coming

When I see the miserably poor sheep couraged about the ups-and-downs and ins-and-outs of sheep husbandry in this still more miserable manner of feeding country. But the facts show that there them, I little wonder that they are cheap has been a steady development of the and that farmers are hard up. The industry, that each decade finds the time has come when margins are small country in possession of better sheep, on the very best, and we must insist on every possible means within his power to more and better wool per head, healthier quality handled with skill if we are to keep his sheep healthy and safe from flocks, greater usefulness, and in every make money. I think you are right; parasites,-dogs, hogs, mules, and cow's way better suited to the wants of the that to succeed we must have more horns included,-when all the possible farmers. Nor is this all; the farmers specific information, more appreci- and common leaks are avoided, flocks themselves have steadily gained in intelli-gence and appreciation of flocks as a methods, and then execute them with losses are expensive. tor of fertility to the soil and of profit brains and skill. When this is done the to general agriculture and better farm- agricultural sheep raiser will be one of ing. It is safe to predict that the next the envied classes of the world. It redecade will show still more marked quires as much brains to be a first-class

" WAVERLEY."

A Specimen Ram of the Scotch Black Faces.

Avrshire is a hilly, mountainous country on the southwest coast of Scotland, with some good soil of light sandy loam in the valleys, and much that is feeders," but not from a great sheep from medium to very poor on the hillsides and moors. The people there are,

Says Sheep do Not Pay.

R. J., Mo., has decided to quit the sheep business, and gives his reasons for so doing as follows: "My flock of sheep don't pay me. I like sheep. They look pretty on a farm. The neighbors all keep sheep. Maybe I have not managed them as well as I might. Last Winter during the icy weather the dogs got among them one night and killed a lot nearly one-half of the ewes miscarried. and some of the lambs died in a week or two after they came. The pastures were very bad last Spring, and the sheep did no good until the drouth set in, when I thought they were in fine condition, but I lost a few sheep, too, by a lot of young mules that ran loose in the stable with the sheep. Please tell me what you would advise me to do?"

Remarks: To be candid with you, our advice would be to quit the business. All the losses, according to your own statements, were unnecessary. You could have avoided every one of them by better judgment and care. While we admit the killing of sheep by dogs is a sheep my personal attention this Winter, difficult question to treat, we do not think there is a single excuse for having sheep killed by dogs at night, nor for any other time, for that matter. Sheep yards, where all sheep should be at night or in the sheds, should be inclosed by a dog-proof fence. Sheep pastures, too, can be dog proof at a very little extra more people who want to buy sheep and cannot get the money than I do those of preventing the destruction of sheep by dogs. The watchful, cautious, and resolute sheep raiser can usually forecast the intentions of the prowling cur and quietly get the brute before he gets the sheep. This is the second best way of protecting a flock from dogs. The man that will not adopt the above precautions must either keep the sheep in sight or hearing of bells, lose sheep, or go out of

The lambs died after weaning by reason of the bad character of the pasof them. While out yesterday I met a tures last June when it rained every day rather well-to-do farmer with a cord of and the grass was rank and deadly. At green wood on his wagon coming to town,a such times the sheep should be confined distance of about 11 pr 12 miles. Many to a small pasture, just enough land for the sheep to keep the grass closely Where this extra fencing cannot be done the mowing machine should be used, so the sun and air could reach the ground and dry the feed.

As to mules killing the sheep, there is loses sheep that way don't deserve any pity; he ought to quit the business; he don't know anything and never will. When the average sheepman shall use

Misleading.

"The Merino shepherd who has his lambs dropped before the supply of grass is abundant will, despite all his best endeavors, have a certain number of ewes that disown their lambs, or have an insufficient supply of milk for them. Their lambs will have to be helped-at least until grass grows-with a few pulls from a feeder twice a day, or such a matter." Remarks: The above paragraph will do for a man interested in selling "lamb

breeding and wool growing journal that has better information of breeds and pet at the last day. Yours for protec-



BLACKFACED RAM "WAVERLY,"

finest specimens to be found in the Shire.

Give the Merino Ewe Due Credits. What is the matter with the Merino

The breeders of English mutton breeds are all pointing to the Merino ewe as making a satisfactory cross with their rams. Of course they do; the Merino makes a capital part whenever and wherever it is tried; and once in a while : man finds out that it makes a most meritorious and sufficient whole. A friend at elbow whispers if it were not continued daily doses of half an ounce of for the strong vitality, useful characteristurpentine given with an equal quantity tics, including the rustling and flocking of olive or lard oil. The turpentine qualities of the Merino ewe, there would he little use of importing any other sheep system is saturated by it, and it is the into this country. It is well known that fumes of it that reach the worms in the the Merino blood improves every sheep paid in, and should classes not fill money subscribed will be immediately refurded.

Herds must be on the grounds Sept. 18, or the right to compete will be forfeited.

The finest pleasure carriage one's taste can fumes of it that reach the worms in the fumes of it that reach the worms

however, a very littelligent, progressive | flock management. The flockmaster class of farmers, and have developed a that is on easy, familiar terms with his superior breed of dairy cattle, which flock will realize that he has advantages takes its name from the country. They at lambing time if he has not at any have a great partiality for a breed of other time. Sheep should have confi black-faced sheep, with which they have dence enough in the owner so they will great success. The picture below is that not be scared to death if he has to catch of a noted ram "Waverly," one of the them. While there are always some wild, skittish, fool sheep in the flock, it is as a rule the fault of the shepherd. A very fussy, nervous man is not fit to handle sheep; he cannot get as much profit out of them as a cool, kindly man. The one will rush in upon the flock and eatch by the wool without saying a word to soothe and quiet them, while the other will speak to the flock and pick them up in the most fondling manner.

Souvenir Hand Book.

Every farmer who is interested in sheep, or expects to buy breeding sheep, should have a copy of this work, which contains a large amount of interesting history of sheep in America, and of the fornation and bringing to the front of the Shropshire breed, and a large amount of valuable matter in regard to the care and management of this flock, selecting sires, improving the flock. The book can be had simply by sending five cents in postage to the publisher. Send at once, as the supply is limited. Address, A. H. FOSTER, Every farmer who is interested in sheep, or

A WONDERFUL COMBINATION

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of them, and so worried the flock that The Best Watch Ever Before Made for Five Times the Money, and the Best All-Round Farm Paper in America

thought they were in fine condition, but the lambs began to die shortly after weaning of some queer disease, and before I knew it they nearly all died. The few left are a mighty puny lot. Presume they will all be dead before grass comes. I lost a few sheep, too, by a lot of young





This watch and chain are not sold without the paper, but will be sent, postpaid, to any address in the United States, delivery guaranteed, with The American Farmer for one year, postpaid, for only \$1.80.

The watch and chain will be sent free of charge, postpaid, to any one who will send a club of only six yearly subscribers to The American Farmer at 50 cents each.

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Address at once

THE AMERICAN FARMER, Washington, D. C.

Wool in Canada.

EDITOR AMERICAN FARMER: While eading the article on fourth page of April 15 issue, entitled "Every Tub on Its Own Bottom," in the letter of D. B. Borden, he uses the argument that raw wool in Canada under free trade is higher than in this country under a protective tariff. The untruthfulness of the statement, while perhaps made in good faith, calls for a statement from me.

I sold my Lincoln wool, unwashed, not one excuse for it. The farmer that in June, 1892, for 20 cents per pound. In October I was in Canada to purchase Lincolns, and asked four breeders what they sold their wool for, which was washed, and each replied the same, 16 every possible means within his power to cents. Another large breeder sold his. unwashed, Dec. 1, 1892, when it was firmer than at any previous time that year, for 10 cents per pound. His statement was made personally at Lansing, Dec. 19, 1892.

My Democratic neighbors had talked wool bringing as much in Canada under free trade as here under protection till I almost believed it; but a visit to the Dominion dispelled their argu-

ments. I imported a nice flock of Lincolns. whose wool, washed, was sold for 16 cents in 1892, and sold their wool early in 1893, unwashed, for 20 cents. I am prepared to prove the truth of this by all the evidence required. One thing is certain, if wool goes on the free list the woolmen of this country will bury those who put it there, by their votes, so deep they will not hear Gabriel's trumtion-H. A. DANIELS, Elva, Mich.

Senaca County, Ohio.

EDITOR AMERICAN FARMER: The freezing weather seems to be past for this Wheat damaged at least 331 per time. cent. There has been a good deal of the clover killed, also, and some of this year's sowing is lost. Stock of all kinds selling low, except fat hogs. I never knew buyers to offer such mean prices for fat sheep this time of year-21 cents with wool on. But the market is looking better past few days .- Scott Holtz, Watson, O.

Advantages of Newspapers.

Mrs. M. Z. Olin, Fruitport, Mich., thinks nothing brings us so near together as papers. She wrote to THE AMERICAN FARMER and did not think of anyone in her old home sceing her article, but a neighbor put it into her mother's hands the first thing.

GOOD PRACTICAL BOOKS AT GREATLY REDUCED PRICES.

practical books, which every lattner should have, at reduced prices:

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A Portable Fence.

There is nothing on a sheep farm that is of more utility in handling sheep than a portable fence. They may be made of light pine fence boards 16 feet long, Make them the width of a wagon bed so they can be moved by the wagon load when wanted in a distant part of the farm. The ends and middle pieces should be well nailed, using wire nails so they will clinch and always be firm. To put such a fence up, drive two stakes four inches apart every 15 feet, place the ends of the panels, between the stakes and tie them with wire. The stakes need not be driven lower than six inches above the top of the panels and the wires put on the stakes will hold them. This way will be handy in putting up or taking the fence down when it may be necessary. A fence of this hight will suffice for sheep or swine, but cattle and horses will get over it unless raised from the bottom by putting a chunk of wood across where the ends meet, or by staking the fence and putting in rails or poles for a rider. These portable panels will be found so useful that no man would think of trying to get along without them when once used on a farm.

AS MOUNTAIN PEAK AND PRIMEVAL FOREST

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renew your laying stock, and sell the re-mainder for broilers. With a good breed

Calendar for May.—This is another in for hatching, and is quite as good with. As it grows warmer lice will be on the lookout for them; use kero-

A GREAT INDUSTRY.

How to Incubate - Raising Chicks. Colonizing Hens for Eggs. BY J. A. FINCH, TAKOMA PARK, D. O

II.



HOUSE 20 BY 60 FEET, built on a slope facing the south or southeast, if ground permits, four feet high at he eaves on the south side.

four inches apart and eight inches from | week, second week every three hours,

and proper feeding for egg production, 2,000 hens will realize \$8,000 annually on eggs alone. The surplus chickens raised from the breeding pens will give over 15,000 broilers after deducting out 2,000 pullets to renew laying stock; which, selling on an average of 20 cents a pound, will give \$4,500.

The guano gathered from the hens would amount to over \$1,460 annually. Cost of labor for plant of this kind is \$1,200; feed, \$1,300; raising broilers, \$1,050; interest on money invested, \$750. Total expense, \$4,300. Total receipts, \$13,960. Net profit, \$9,660.

With good men of experience and the same close attention as given to commercial pursuits, the above figures may be realized.

SORGHUM.

Method of Cultivating This Valuable Crop.

EDITOR AMERICAN FARMER: I am farmer; have lived both in Iowa and Kansas, where a great amount of molasses is made each year, and think a description based on experience in the cultivation and management of sugar cane and its manufacture into molasses may prove valuable to many readers of THE AMERICAN FARMER.

The best variety of cane is the Early Amber. It received this name because it makes a beautiful, clear, amber-colored and fine flavored sirup. It is so full of saccharine matter that it is no unusual matter, after the molasses is all drawn from a barrel, to find it one-third full of sugar. Early Amber ripens in about from 90 to 100 days, grows 8 to 9 feet high, weighs from $1\frac{1}{2}$ to 2 pounds; stripped and topped, 1 to $1\frac{1}{2}$ pounds. Any land that produces good corn will produce good cane. It requires the same cultivation as corn, excepting just when the plant comes out of the ground it requires a good deal of attention to keep it from being choked by weeds. The plant is vigorous, and after getting a good start the care is the same as for corn. Plow deep and work well: all extra labor put on the plant during its early stage will be well repaid in the increased value of the crop. 'Don't replant unless absolutely necessary, as it is important that all the cane should mature at the same time. Again I say plow deep, as the cane roots penetrate the soil to a depth

of several feet. A good variety of cane should produce 200 gallons of sirup per acre on good land. A great deal depends on the seed, and it is very important that the seed is pure and of the best variety. In order to be sure of the quality of the seed, take a small box, fill it with sand, moisten it, drop in 100 seeds, set in a is believed to be pure moderately warm place, and cover up. In two days remove the cover; in five days 90 out of 100 of the seeds will have germinated. If not, the seed is not good, and other seed must be procured.

Plant about 10 seeds to the hill, at the rate of from two and a half to three pipes, and for the remainder of the house pay a greater profit for the amount of pounds per acre; when five to six inches

If planted early, cover the seed onehalf inch deep. If planted late, cover the seed from three-fourths to an inch deep, and press the earth firmly over them. The reason for this difference in planting is this: If planted early, and the ground gets wet and cold, the deepcovered seeds rot and die, while the lateplanted seeds are not liable to meet with nuch wet or cold spells. Don't let the plants stand too thickly. If you do, a

poor crop will be the result. As soon as the plants come up, destroy weeds. Give it all the assistance possible in its early stages. As soon as the rows can be followed, stir the soil about roots. When it is two and a half to cutting the roots and injuring the

It should be stripped, topped, and cut just as soon as most of the heads are turning brown, as the crop is not improved by letting it remain on the field

For stripping cane we make a thin wooden blade 21 to 3 feet long, with a handle at one end. Two or three men can easily strip and top an acre of cane in a day.

It required but little labor to select. gather, and preserve all the seeds that may be required for next season's planting, and this important work should not be delayed.

I usually select a lot of finely-headed talks and let them remain on the field till fully mature, when I gather them for eed. The right way, and really the best way, is to select one part of the patch where the heads are brown and go through, tasting the juice from each stalk, and whenever you find a very sweet stalk with a finely-shaped head take it for next year's seed. Both size of stalk, early maturity, and taste of the sirup may be provided for by being careful in the selection of seed heads.

Let the seed get very dry before putting it away for Winter, as it is very liable to mold by heating. The heads should all be gathered, as they are of as much value for fattening hogs and feed-ing horses as Indian corn. If it pays to pick up an ear of corn, why, it pays to

pick up a head of sorghum seed.

I might write several columns describing the manufacture of molasses, but will reserve that for a future article.— Asiatic fowls or Barred Plymouth Rocks run. Select out the best pullets to IRVIN J. BAILEY, Freeburg, Pa.

Swarming season usually commences about 10 or 20 days after white clover comes into bloom. The bees often swarm simply from lack of room and want of

In hiving, one essential is to have the nives in a cool place. The bees will enter a cool hive much more readily than one which has been baked in the hot sun

a great influence on swarming. Bees with a young queen are less likely to swarm, and one reason is that such a queen does not lay so many drone

stands should be placed to each other. They should be in a sheltered, somewhat shaded place, and where the bees can be

bee culture a success. In both cases everything has to be performed in the right way, at the right time, and requires the strictest attention.

consumes as a nightly diet thousands of moths, and he will not do any mischief if the hive is kept well above the ground and nothing is left to enable him to crawl up to the entrance.

Yellow jackets are sometimes trouble some, especially when they get bold enough to enter the hives. They are well able to cut into fruit and are responsible for much in this line which is attributed to bees. Bait the gauze fly trap with raw meat to trap them.

A simple way to pick out a queenless colony is to observe the hives when the bees are packing in pollen. If you come to one where the bees bring in no pollen, that hive is queenless. They need none, and do not bring it in because they have no brood.

be done in the Spring. Have a box in readiness, the size of the hive and a foot deep, for a driving box, an ax, a saw, a large knife, some goose quills, twine, water to wash honey from your hands, and some vessels to put the honey and pieces of comb in. Have also a bench to lay the comb on.

PRACTICAL APICULTURE.

Paper Read at the Bloomingburg Farmers' Institute by S. R. Morris, Bloomingburg. O.

quote something from some of the imbe experts in the business. A good neighbor said to me a few years ago that he had a good, strong colony that came through the Winter, the only one out of about six in the Fall. Upon this only easily as his family, and in many cases colony left he was erecting many very high castles. He was getting along in years and going down the shady side of the hill, and right at this juncture of his life imbibed the idea of going more extensively than ever before into the busiall the weeds, and keep it clean. It ness of bee culture. So with anxious grows slowly at first, and if left to take eye he watched his bees from early Spring care of itself, it will soon be choked by weeds. Give it all the assistance poswithstanding they were in an old box hive, that they were multiplying very the plants; after it attains a growth of rapidly, and as the season progressed 12 inches, take care not to injure the and the bees got very strong and numerous, the idea occurred to his mind that three feet high, leave it to take care of they might swarm soon and would need itself, as further cultivation would do a hive, but yielding to carelessness and more damage than good to the crop by negligence, two of the beekeeper's worst enemies, he let the time pass until one day he saw the air full of bees, which very soon revived the thought in his mind that he must have a hive to hold his new swarm. He looked around and found an old box or nail keg, or something of the kind that perhaps had sheltered the fourth or fifth generation of chickens, and preparing a table and setting it under the small tree upon box on it, reached up and pulled down the tree over the table, gave it a sudden shake, and bees falling in front and getting a squint at their new quarters, as didn't deposit their, best regards in the beekeeper's face for safe keeping, took

wing for parts unknown, This is only one instance out of the many showing the impracticable mode of managing bees. One of the most important faculties in the success of any occupation is the love you have for your business. It is no uncommon thing to see some men the most energetic and enthusiastic-we might justly call them perfect bee giants during a very prolific the rate of 10 pounds per colony daily; but, on the contrary, such a season as that of '92, they may be heard to say: make honey enough to keep themselves, let 'em die; I'll spend nothin' on them to bring 'em through the Winter.' Showing that the only love that class of beekeepers have for the business is for the money or honey that's in it, and not for the bees. To make a successful beekeeper means to know just the condition

honey flow, and whatever is needed supply it at once.

For scarcely in any other business is

negligence and delay so fatal to success. To illustrate this assertion: Suppose that A and B each have 100 colonies of bees in equal condition when Spring time comes. A has everything ready that the bees require by the time the honey harvest has come; his hives are full of bees, also a good prolific queen is in each hive; his queens are all clipped; a sufficient quantity of nice worker comb filled with brood in each hive; all needed surplus boxes filled with one pound sections ready to put on hives when the bees are ready for them. The bees go to work with a vengeance, and, putting it low, we'll say they store five pounds each day per colony for 20 days, amounting to 100 pounds per colony; 10,000 pounds for his 100 colonies, at 20 cents per pound gives A the neat little sum of \$2,000, and his 100 colonies left in as good condition as when he began.

On the other side of the picture, Mr. B begins the season with his 100 colonies in equal condition with A's, but having too many irons in the fire, and a little careless, too, and devoid of love for the business, his bees dwindle until one-half are dead, and the balance, very weak, are neglected. The weeds and grass grow up around them, almost imprisoning those inside, and if perchance one gets out to fly to the field is almost excluded from entering the hive again.

If he should chance to have a swarm, which would be very doubtful, he would have no preparation and would doubtless lose his swarm, leaving the old colony depopulated and unable to give any surplus honey, while his entire stock after Spring dwindling ceased would be the hole season getting strong enough to store honey enough to winter themselves, giving B nothing for his negligence, except an experience that would cause him to resolve that there is "nothing in bees

A great objection is raised to the business end of the bee even by some who are engaged in the business. To this objection we would say that it is without foundation. Not that the little pets cannot sting, for it was so ordered by an allwise Providence that they should be provided with some weapon of self-protection against thieves and enemies; but to the practical beekeeper this is no objection, for it is so easily controlled that the fear scarcely ever enters his mind. Another objection with some is, the bee moth will destroy them. To this we would say, keep Italian bees, supplied with a good prolific queen, and you will not be troubled with bee moth or worms. Another is, it takes too much time to attend to them. To this we would reply that no greater per cent. of net profit is obtained from any other farm pursuit, according to the time and expense they require. In proof of this a little calculation is sufficient. A colony of bees is worth \$10 May 1; 8 per cent. interest on investment, 80 cents; labor one day \$2.50; other necessary expenses 70 cents: total \$4

Such a colony as the one named above should, at a very reasonable calculation produce 100 pounds surplus honey, worth 20 cents per pound, or \$20, to say nothing about the increase of perhaps two colonies worth \$5 each, summing up the enormous yield of \$30 for an investment of \$4. In order to show up the practical or 750 per cent. profit. To this may be ite a per cent. for the pleasure and enjoyment of the business, as well practicable workings of men who claim to as receiving many valuable lessons in natural history that could be obtained

in no other way.

The practical beekeeper should be able to manage and control his bees as very much easier; indeed, he should have them under such complete control that when a swarm issues and clusters on a limb 50, 60, or per chance 100 feet high, by the time he is ready to have them enter the new home they come down from their lofty hight, go right in, take possession, and go right to housekeeping immediately. They should be under such complete control as to numiliate themselves and show a great appreciation for their keeper whenever e undertakes to work with them.

There is quite a visible contrast be ween the government of a well-managed colony of bees and the workings of our own Government. The rulers behave themselves nicely, show due respect to their constituents, bring food to the young and helpless, abhor contentions, strifes and disloyalty. If they, by indolence, extravagance and mismanage ment, should fail to provide for their own households, rather than bond their future posterity to death, would suffer death themselves. In a well-regulated colony everything is kept clean and in order.

I will mention one more custom of the honey bee, and the one which, I would think, should be the most depreciated from a human standpoint; namely, that when the old man becomes old and his services of no more use to the family, and, at a time when he feels that he really needs the sympathy and care and to the depth of two inches. Weeds must consolations of a dear wife and loving children to cheer his pathway through his declining years, he is kicked and cuffed about, forsaken and despised, by wife and children, and is at last driven out of home without food, sympathy, or shelter, to pine away and die.

Fruit will be scarce this year and very grower and farmer should make the very best of his orchard. The good prices which first-class fruit will bring ought to be an incentive.

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GARDEN. THE

· Pluckings.

Weeding time comes right after seeding time.

The Eleagnus edulis is a new fruit which comes to us from Japan. It is a fine shrub, bears bright-red berries of good eating quality, and has been well- to Aug. 1. That sown in April and tested.

For the past few years there has been much creditable effort to encourage the culture of gooseberries. Columbus and Red Jacket have both done well in New York State. In planting Winter vegetables, like cel-

ery, squashes, parsnips, salsify, and beets, an exchange says " plant twice as many as you think you will need, then double that amount, and you may have enough." Dissolve a large spoonful of pulver-ized saltpeter in a pail full of water, and put on and around your visne early

in the morning, to kill and drive away the striped bugs. Catch the large, brown ones, and kill every one, as they will kill your plants. English gardeners dip the roots of

cabbages, when taken from the seed bed, in a thick mixture of clean soot and water. This is to prevent club root, and is about the same in effect as using for a seed bed the piece of ground where the brush heap has been burnt. When this is done, the top soil is stirred with a hoe as soon as cool, and the seed scattered over the surface and raked in.

Radishes are both hardy and early. They need a rich, loose soil; clay is never good for them. Give them plenty of good culture and the crop will be off the ground in five or six weeks. They are often grown as a "catch" crop between beets, cabbage, cauliflower, cucumbers and other vegetables. For early Spring use, the best varieties are French Breakfast, Olive Shaped, Long Scarlet. and Round Scarlet White-tipped.

Set out two or three hundred white plume celery plants in your richest and best prepared ground. The rows should be 10 inches apart and the plants five inches apart in the rows. Keep the ground between the rows well stirred for a few weeks. The soil needs a thorough soaking once every week when the plants begin to cover the ground. By August the plants should begin to be good for

To illustrate the possibilities of improvement by selection, Mr. Brill, of Hempstead, L. I., in an address before a Farmers' Institute, stated that one of his neighbors began 10 years ago to secure a strain of asparagus by selecting white shoots with the purpose of establishing a fixed variety which would produce nothing but white asparagus. Fully 90 per cent. of his plants now come true, and for every bunch sold he receives a substantial advance over the market price, and every pound of seed which he saves is worth three times as much as ordinary asparagus seed.

Who Knows a Cure?

EDITOR AMERICAN FARMER: Allow me to ask you through your valuable paper if you or your readers know anything that will destroy the garden flea. and if so, is this mixing due to a less-It is a small black bug, and hops just ening of its restrictive power by change like a flea when approached. Last year they nearly destroyed my tomato vines from flint to dent? Or, is it a distinct when they were first transplanted in the garden. They are very destructive on cabbage, radishes, peppers, potatoes—in fact, anything that is pungent. I have seen the flea in Kansas and Iowa, but have never seen them as destructive any place as here, I think. If any one can tell me what to do to destroy them, they will confer a great favor. Last year we used sulphur by sifting it on the vines; then we tried London purple, and I do not think anything did any good. They seemed to run their full course.-MRS. ELIZABETH DELAY.

Peanuts.

EDITOR AMERICAN FARMER: I wish you would give an account of how to raise pea-nuts: what time to plant, and how to man-

Though peanuts will grow much further north in Ohio, Indiana, Illinois, etc., than people generally have sup posed, we very much doubt if anything can be done with them as far north as Wisconsin. The peanut, which is a very valuable crop wherever it can be raised, is a legumin belonging to the clover family, and peculiar in maturing its fruit underground. It requires a warm, well-drained, porous soil, with plenty of lime in it. The land should be prepared early in the Spring, and thoroughly pulverized before planting. It should be checked in rows, from 24 to 32 inches apart, and the planting done about the last of April or 1st of May. Two peas, carefully hulled out by hand, so as not to break the inner husk, are dropped at the intersection of the rows and covered be kept out, and the soil kept loose and fine. The crust must be broken as often as it forms, with a harrow, and, finally, with double shovels, cutting the grass out with hoes. After the flowers fall, the stalk lengthens and thrusts itself into the ground. When this is well done-usually about the 1st of Augustthe crop is laid by until frost. Then it is harvested by running the point of a plow under the vines to cut the roots, and lifting the vines out with a fork, After they are wilted they are lightly stacked around a pole to the hight of seven feet, and covered with hay or straw. In about four weeks they will be ready to pick. The average crop is from 40 to 60 bushels to the acre. In Tennessee they cost about 40 cents a bushel to grow, and sell for about \$1 The vines are fine stock feed, but, if not used for this purpose, should be returned to the ground for fertilizer.- EDITOR

Sowing Rape Seed.

EDITOR AMERICAN FARMER: When should rape seed be sown? How early and how late in the season to grow and make pasture and seed? Will it live over Winter if sown in Fall? Say, if sown in September?—A. J. CROPSEY, Ogden, Utah.

There is the widest diversity of opinion and practice as regards sowing rape. The time extends all the way from April 1 May is intended for pasturage in August; while the later sowings furnish food for September, October, and November. We do not know as much about growing rape in this country as we will next year, because it is now in the experimental stage, and while it will be a very valuable plant for the whole of the northern half of the country, there will be many modifications of its culture to get the best results in localities that differ widely as to soil and climate. Without being at all well informed as to the climatic conditions of Ogden, Utah, we yet think that it will not be wise to sow rape as late as September, because it is unlikely that it can come to anything before its growth is stopped by cold weather. After heavy freezing it is somewhat hazardous to feed it. As to its living through the Winter depends upon the Winter, and we should say most decidedly that it would not live through a Utah Winter.-EDITOR AMERICAN FARMER

Mixed Corn.

EDITOR AMERICAN FARMER: It is well known that varieties of maize are mixed by pollen being carried from one to the other. There are, however, some varieties which seem to have a considerable power of resistance and to maintain themselves free from contamination. so far as outward appearances are concerned, for a long time. Waushakum, a small New England flint corn, is one of these with which the writer is acquainted.

There is a variety of deep-red flint corn which is also credited with being strongly resistive. It is said by some observant farmers in New York never to have mixed under their observation. although having been grown with their local yellow variety for a considerable number of years.

Recently an ear of dark-red dent corn has been brought into my office, which is mixed with some other variety. It is said to have been raised in Chatham County, N. C., and was brought to me with a yellow ear. About one-fifth of the kernels on the red ear are nearly white, with very numerous fine red stripes from point to crown. The lightcolored kernels are all in a solid body on the cob, and extend from the butt end up to the middle of the ear on eight rows. On each side of the eight one or two kernels have the mixed and dark coloring, with a distinct line between. There is no gradual shading from one to the other.

On the dark part of the ear nearly all the kernels have a small, light-colored spot at the top. In some it is partially hidden in the dent, but toward the tip of the ear there are no dents, or only traces of them.

Some interesting questions about this corn are whether this is the same red variety as that grown in New York; dent variety of red corn, with less force to resist or overcome the pollen of other varieties than the red flint?-FRANK E. EMERY.

The Locusts are Coming.

This is to be a locust year, without doubt. The New York Entomologist reports great quantities already appearing in that State. Around Sedalia, Mo. the farmers are plowing up countless millions of the insects, and the same report comes from several parts of Illinois.

HEADOUARTERS

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FEEDING CHICKENS.

kept in each pen.

This part of the business requires great care and watchfulness. One must know what is required to build up a strong body in order to produce a broiler of one and one-half pounds in 10 weeks. A great deal depends upon the breed.

I mention a few to show that since ex-President Hayes advocated the poultry industry as a profitable one, rapid strider

To those who have large farms within 20 miles distance of cities of 25,000 inhabitants, and would like to utilize them for profit by adding the poultry industry, I would suggest the following plan, which I know from practical experience would pay a large profit Colonize 2,000 hens of a good laying breed into colonies of 12 hens (no roosters) each. The house to be partitioned off so that each colony will have house room 12 x 15 feet, outside runs 12 x 125 feet, with fencing eight feet high, boarded up two feet, with six foot wire (two inch mesh) on top. Have fruit trees set out through center of runs for shade. Henhouse to be built similar to brooder house. Keep 300 hens for breeding purposes on same plan as above, with 10 hens and one rooster for each

and Wyandottes are the best for broilers as they feather slowly, consequently developing quicker in bone and muscle. Avoid feather-producing food as much as possible until they are six weeks old.
I would advise for the first six weeks

to feed two-thirds nitrogenous and onethird carbonaceous foods; after that reverse the foods, which will give a good broiler at 10 weeks. This does not apply to laying fowls. Twenty-four hours after the chickens are hatched, feed rolled oats the first six hours, then a few bread crumbs moistened with scalded milk, at a temperature of 60°. After the first feed of moist food place your fountains of water in the runs, it being the same temperature. Keep the water at this temperature for one week, and in no case give cold water. Never let the chicks run outside unless the sun is warm. If the wind is blowing strong keep them in and throw small grain in the scratching portion of the pen, with a cabbage suspended about three inches from the floor as green food for them to pick at. Always keep them busy. Give meat three times a week-about a half pound chopped fine to 50 chicks from one to three weeks old; increase amount of meat ac-

cording to age. A bill of fare can be made from the following foods: Cracked wheat, cracked eight feet to the crown and corn, buckwheat, oats, hard-boiled eggs, seven feet to the eaves on the north side, sunflower seed, bread crumbs, lean meat a tongue-and-groove floor laid 12 feet chopped fine, steeped clover hay mixed wide the entire length of building, with with bran, cornmeal (scalded) mixed with a four-foot walk running the length of a little sand, green food-consisting of the house on the north side, makes a cabbage, lettuce heads, sugar beetsconvenient brooder house. Four feet chopped fine, occasionally a few onions, from the walk have your brooder pipes changing about, so they will not get the laid lengthwise of the building. For same food each day. Small chicks the first 15 feet use eight one-inch pipes should be fed every two hours the first



SECTIONAL VIEW OF HOUSE AND RUN.

the four feet between the brooder pipes | broilers with profit.

the temperature of the room will be suf- capital invested than any other branch ficient. The first 15 feet lengthwise of of industry. building should be divided into three inches square should be placed at the 4,000 ducks. This plant represents the front end of pen, resting on the floor, to investment of \$120,000 capital. be used as a door, sliding either way, through which the chickens have access permits. All the sash in the house whitewash on the inside to shield the chicks from the direct rays of the sun. Hundreds of chickens are killed when placing a thermometer on the floor where the sun focuses, it will often register as high as 160 degrees, and the little chicks will huddle upon this spot by

the floor, covered with a lid, the same | after that three times a day. Always as diagram. Attach rows of drapery to keep plenty of litter in the pens, such as the lid so that they will hang down be- leaves, chaff, or cut straw, and plenty of tween the pipes to within two and a half clean sand. Clean out under the brooder inches of the floor; cut in pointed strips | pipes and the feeding space every mornso as to enable the little chicks to nestle ing. Feed so that they will eat all up under the drapery with comfort, and clean, change their drinking fountains this will also allow them to run through three times a day, and use whitewash to the scratching portion of the pen, which is filled in with gravel. Reserve carefully you will be able to turn out

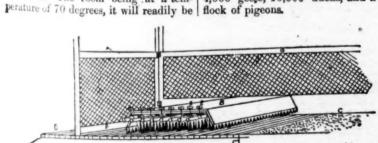
and the walk for feeding.

There are farms in close proximity to our cities that could be used for estabhave six pipes, the third 15 feet four lishing colonized henneries, which would

Within the past five years a number pens of five feet each. Have partitions of our leading financiers of Boston, New our feet high, the first foot being a base York, and Philadelphia, who own fine board and the three remaining feet wire of one inch mesh; entrance from the ness for profit. Dr. Green, of Boston, walk through doors made of the same owns a plant in the State of New Hampwire. A sash 3 x 6 feet should be in the shire, whose brooders and incubators roof directly over each pen near the eve | have a capacity of over 200,000 broilers of the south front. A small sash 24 a year. He also keeps 15,000 hens and

Ex-Vice-President Morton, of New York, has a very fine plant on the Hudto the out-door runs when the weather son. Among others are Wm. K. Vanderbilt, Agustus Belmont, T. A. should be covered with a thin coat of Havemeyer, jr., Robert Colgate, George Peabody Wetmore, and Sydney Dillon Ripley. There are a few men on Long Island, N. Y., who supply New York city two weeks old by the sun, and the at- | with over \$1,000,000 worth of eggs and tendant is at a loss as to the cause. By poultry annually. On the Pacific Coast poultry ranches are becoming quite

numerous. Mr. George Hills, on Puget Sound, keeps 90,000 chickens, 20,000 turkeys, the hour. The room being at a tem- 4,000 geese, 10,000 ducks, and a large



SECTIONAL VIEW OF BROODER HOUSE. A, entrance from walk to nursery pen. B, lid over brooder pipes. C, scratching space. D, walk.
E, pipe valves. F, feeding space.

seen that the difference between 160 degrees and 70 degrees, being 90 degrees, would cause the chicks to become chilled, and it would be certain to give them have been made in this business. bowel complaint.

The first week the temperature should register 93 degrees under the brooder pipes three inches from the floor; the second week, 85 degrees; the third week, 80 degrees; the fourth week, 75 degrees, and after that the temperature of the room, 70 degrees, will be warm enough. The temperature of the brooder house should vary no more than an incubator, and no more than 50 chicks should be

THE APIARY.

Hummings.

The presence of drones is said to have

Two feet apart is the nearest that

seen and heard from the house in swarm-Mrs. Harrison says any woman who can make a good loaf of bread can make

Look on the toad as a friend. He

To be successful, transferring should

There is an existing doubt in the minds of some, as to whether it is better to produce extracted or comb honey. It is a question well worth pondering. It is estimated that twice as much extracted honey may be produced as comb, at the same cost, and with much less required skill. The former will bring eight cents and the latter 16, but it must be further considered that honey is usually preferred in the comb because it

side of this question, we will endeavor to which the bees had clustered, put his quick as thought arose and the few that

eason while the nectar is coming in at "The bees are no good; if they can't of every colony, especially during the

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tunity to see it and examine it, with a riew to subscribing. We ask you to compare its contents, objects, and price with those of other papers, and see if you do not come to the conclusion that you bught to have it; that you cannot afford to do without it. We can assure you that if you send in your name for one year that you will find it one of the most profitable investments that you can make. We hope to make and keep it so interesting that you will think that every number more than repays you for the subscription price for a year. Please pall your neighbor's attention to the

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The National Tribune.	1 00	1 25
Bodey's	3 00	8 00 85

THE New York World, organ of the importers and the foreign merchants,

United States in 1890 was only 227,000 tons, 1892: It would be cheaper to buy all of it and dump it nto the Gulf of Mexico than to put a protecttve tax on imported sugar because of it. Once on the free list always on the free list!

OUR NEW CLUB OFFERS.

We have arranged to club with the Weekly Witness of New York. Its price is \$1 a year when taken alone. The Witness is a 16 page weekly paper and among its contrib Rev. Josiah Strong, D. D.; Rev. John Hall, D. D., L. L. D.; Rev. Robert S. MacArthur, D. D.; Rev. Theo. L. Cuyler, D. D.; Rev. M. C. Lockwood, D. D., of Cincinnati; curent weekly sermon by Dr. Talmage; Sunday school lesson by Dr. George F. Pentecost, etc. It is one of the strongest and most popular mily newspapers publised.

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SIGHTS AND SCENES OF THE WORLD. Number 10. Part 10. NUMBERS CHANGED EVERY ISSUE. Cut this coupon out and forward it, to-Five Two-Cent Postage Stamps, to the Coupon Department of The American Farmer, and you will receive the elegant portfolio of photographs as advertised. See our advertisement on another page.

OUR GRAIN COMPETITORS.

The following comparison of the imports of wheat into Great Britain for the first three months of this year, with those for the same period of last year, show how strong is the competition we are meeting with from Russia, Argentina, and other countries:

British Imports of Wheat. Three months Three mon 1894. 1896. Bushels. Bushels Total from Unit-ed States.... 16,706,188 9,219,408 Argentine Republic British India Total from other countries 12,339,657 5,574,334 Grand total..... 21,559,065 22,310,523

This shows that our loss was 7,516,780 bushels, of which Russia gained 2,802,-996 bushels; India, 2,302,108 bushels; Argentina, 750,165 bushels; Chile, 556,724 bushels, and other countries, 393,330 bushels.

Last year the United States exported 67,000,000 bushels of wheat; Russia, 96,000,000 bushels; Hungary, 44,000,-000: India, 41,000,000, and Argentina 27,500,000 bushels.

The moral of this is that we must cease relying on the foreign market for our grain, and devote more of our land and energy to raising the \$300,000,000 worth of agricultural products which we

buy abroad. We must simply make up our minds that Russia and Argentina will glut the wheat markets of the world in the coming years. It is about the only money crop the peoples of those countries can raise, and they will sell it for whatever they can get for it. Russia has built immense lines of railways for strategic purposes, which will carry the wheat to the seaboard at low rates, or for nothing if necessary.

The sooner we recognize these stern facts, and turn our attention to other lines than raising wheat for exportation. the better for all concerned.

THE SUGAR QUESTION.

We simply must raise our own sugar. The American people are probably today the greatest sugar-eaters in the world. In 1892 they ate 67.46 pounds of sugar per head. The consumption had increased over 13 pounds per head in three years, having been 54.23 pounds per capita in 1889. Then our consumption was far ahead of that of any other people in the world except England. The following table shows the consumption per As the total production of sugar in the head per annum in several countries in

Countries.	Pounds.
Germany	23.56
Austria	18.05
France	
Russia	10.34
Holland	26.28
Belgium	21.29
Denmark	
Sweden and Norway	24.14
Italy	7.18
Spain	11.00
England	80.70
Turkey	9.33
United States	67.46

For the fiscal ended June 30, 1893, we imported the enormous amount of 3,731,219,367 pounds of sugar, valued at \$114,959,870.12; and 15,490,757 gallons of molasses, valued at \$1,992,352,43: or a grand total of \$116,952,222.55 in gold that went out of the country for sweets. Adding freights, commissions, undervaluations, etc., the whole amount would probably reach \$150,000,000, or nearly \$2.50 for every man, woman, and child between the Atlantic and the Pa-

We sent \$63,000,000 to Cuba last rear for sugar and molasses, \$12,000,000 for tobacco, and bought other things, raising the total purchases to \$79,000,-000 in round numbers. In return we sold her but \$24,000,000 worth of goods, leaving her ahead of us at the end of the year over \$55,000,000.

We bought \$10,000,000 worth of sugar and molasses from the British West Indies, and other articles raising the total up to \$16,628,000, and sold them back but \$8,000,000 worth, leaving them over \$8,000,000 ahead of us at the end of the year. We bought \$3,000,000 of sugar from Brazil, \$57,-000,000 worth of coffee, and other products to swell the total up to over \$76,000,000. She bought of us only \$12,388,124 worth, so that she was ahead of us in the game over \$64,000,-000. We bought \$5,000,000 worth of sugar from British Guinea, and sold her \$2,000,000 of products, leaving her \$3,000,000 ahead of us.

So it goes everywhere. Sugar drains away our gold by millions to enrich people who buy at the most very little of us, and only those things on which we make slender profits.

It is clear to every thinking man that we cannot long go on doing this without stripping the country of its money and inviting bankruptcy.

We are the only country in the world DO YOU WANT to-day except England that does not

raise her own sugar under her own flag. England can afford to buy her sugar abroad, because she pays for it in manufactures upon which her people make a

Other European countries have managed so wisely that the cane sugar is replaced by that manufactured from beets raised by their own farmers. Of the 6,500,000 tons of sugar consumed by the world last year more than 3,500,000 tons were made from beets raised in the countries where the sugar was consumed.

It will be inexcusable folly for us not to follow their example.

Let us pay our own farmers this \$150,000,000 a year, which will mean greater prosperity to them than quadrupling our exports of wheat and meat.

THE men in charge of the tariff bill assure the country that it will certainly pass, but they are very reticent as to what shape it will be in when it does. Their discordance of views was very adroitly exposed last week by Senator Aldrich offering to agree to take a vote upon the measure at 3 o'clock that afternoon. This produced quite a flurry among those in charge of the measure, as they had been pretending to the country that the delay in the passage of the bill was due to the procrastinating policy of its opponents. They hurriedly set up Lindsay, of Kentucky, to talk while they could consult and arrange a plan by which they could assume to be ready for a vote, but gain time to finish a compromise bill that would command enough votes to pass it. We are sorry to say that all the compromises that have been hinted at relate to protection to manufacturers, and none to better provisions for agricultural products. Except in regard to sugar, the bill appears to be as obnoxious to farmers as when it came from the House.

AGAIN, we earnestly warn farmers by the cheap-clothing clamor. The duties on wool play little, if any, part in the cost of a suit of clothes. If every cent of the duties on wool were paid by the consumer, it would at most make but a few cents difference in the cost. The protection is all on the labor of making, to save the workmen from competition with the "sweat shops" of England. Whether this is right or not, we will not discuss. That is for the tailors and factory operatives to consider. We sincerely protest against a duty imposed "Let every tub stand on its own bottom." We shall not help fight their battles while they turn upon and rend

THE proposal of Kaiser William to make the peanut a liberal portion of the German soldier's rations has an unusual interest for American farmers. First, it is something that there is a fair margin of profit on, which there is not on wheat and corn sold abroad. Second, we would not have, for the present at least, the destructive competition of Russia and Argentinia. But we fear that just as soon as the Kaiser's soldaten begin to eat peanuts in considerable quantities, he will order the German colonies in Africa to go into peanut raising. Anyway, it will be some years at least before they can produce as good and cheap peanuts as we can raise in the South.

THE English are doing the thing that we have urged on the people of the South. They are building mills in Egypt to spin the cotton raised there. When we are properly developed not a ton of raw cotton will be shipped from the South. It will all be spun into yarn, at least, by the splendid water power now running to waste within a short distance of the cotton fields.

CHEAP wool does not mean cheap clothing by any means. There is where the demagogs have fooled the people of five pounds of wool that enters into the average suit of clothes is a very small item in the ultimate cost. The main expense is in the labor.

Anxious Inquirer: The best time to spray free trade farmer robbers will be next November. Use the common-sense mixture, with the independent nozzle, and apply hot. See that the work is done before sundown.

THAT stanch Democratic organ, the Louisville Courier Journal, says that the Wilson Bill "will be a gold-brick swindle on the people."

TO MAKE MONEY P HERE IS A SPLENDID CHANCE

THE AMERICAN FARMER WANTS 1,000,000 subscribers and it should have them. It is so good and so cheap, that it should be in every farmer's home.

We will give a very liberal commission to canvassers, young men and women, wanting to raise money to pay for education or for other purposes, and older ones out of employment cannot do better than to write to us for terms and sample copies, and engage in canvassing for subscriptions.

Almost any one ought to be able to make several dollars a day at this in any good farming community. Address

THE AMERICAN FARMER, 1729 New York Avenue, Washington, D. C.

In spite of the depressing effects of the Wilson Bill, there is a slight improvement in the demand for wool. If the bill could be defeated there would be an immediate and very strong rise in price and development in demand. The shop shelves and factory stocks have been effectually cleaned out by the long drain upon them, and more goods are urgently needed. The question is whether these shall be of American wool and manufacture, or whether the country will be deluged with foreign goods. Nobody is going to buy anything that he can help until the question is settled.

CHICAGO bears claim that wheat will not go above 60 cents, because the moment it does English buyers will take Russian and Argentine wheat, which they can get cheaper. Why sell wheat abroad? Our own people will pay more than that, when they have plenty of work and

ONE certain way of making farming pay and making money plentiful is to raise at home the \$300,000,000 worth not to allow themselves to be confused of farm products that we buy abroad every year. Let'us all unite on this.

Farm Mortgages in Minnesota.

L. G. Powers, Labor Commissioner of Minnesota, is a statistician of recognized ability, and whatever he says commands much attention from real thinkers and students. He has made a thorough study of the farm mortgages in his State, and presents the results in his third biennial report.

He finds that the mortgage foreclosures in Minnesota on farm property have in the last 10 years decreased, relatively, 35 per cent. and that the general condition of the farmers, as a whole, has to that same extent been improved since for their benefit being charged up against the year 1880. In certain of the Counties the number of the foreclosures of rains in this section were especially benemortgages has been considerable, but ficial to the truck interests. these are largely massed in a few Townships containing the poorer lands, while the experience in other Counties show that the general condition of the agricultural districts has so improved that, relatively, there is but little more than one-half the mortgage foreclosures which existed in the 15 years before

> Commissioner Powers says respecting loans made in Minnesota: Very many of the borrowers have been speculators, and not farmers. They have, by nominally complying with the laws of the United States, acquired titles to some land, not intending to farm it, but to sell it and realize something from the pro-When land has settled up quite rapidly and there has been a great demand, these speculators have been able to dispose of their claims by sale. In seasons, such as have recently prevailed in the farming regions of he Northwest, the cash sales of new farming land have been difficult, especially with the poorer grades of land. Men with money to buy land usually know enough about the same to discard the poor tracts which are to be found in nearly every County in the Union; hence the only way for a speculator to realize any cash out of a poor piece of land is to mortgage it to the fullest possible extent and then abandon it.

The evidence collected shows that in many respects the burden of mortgage indebtedness rests more heavily upon the owners of speculative property than upon that devoted to legitimate business, and that the farmer is suffering, relatively, the least of any calling. The chief reason for this improved condition of affairs is, in Commissioner Powers's opinion. found in the improved methods of agriculture which have been introduced in the demagogs have fooled the people of the last 10 or 15 years. Before that the country. The price of the four or time the farmers of Minnesota relied for their income quite largely upon wheat. Now, in the longest-settled groups of Counties improved methods of husbandry have brought with them a greater variety and rotation of crops. The amount of wheat raised in these Counties is but a little over a third of what it was 10 years ago. Instead of depending upon one product alone, the farmers have varied their production, and in this way have not only increased the value of their land, but have put themselves in a position to liquidate their obligations, and in those cases where their land is mortgaged to defy

Ask all your neighbors to subscribe for THE AMERICAN FARMER.

Departure from Normal Rainall or Week Ending April 23, 1894.



WASHINGTON, D. C., April 24, 1894. TEMPERATURE.

The week was warmer than usual in all districts east of the Mississippi River and in Louisiana and Texas. The temperature was also slightly above the normal in the interior of California and in Montana. The greatest excess in temperature occurred in the districts on the

Atlantic Coast and in the Lower Lake region, where warm rains greatly improved growing crops. Generally the week was cooler than usual in the States west of the Mississippi River, but the weather conditions were favorable, and all crops are reported as in good condition and improving. In the Springwheat region the weather continues cold and wet, and growth and seeding have

On the Pacific coast the weather conditions were favorable in Washington and Oregon, except the frosts that occurred on the 17th in the southern Counties of Oregon.

Drouth conditions continue in California, which have seriously affected the outlook for grain, hay, and pasturage. Drouth conditions also continue over the greater portion of Florida, seriously affecting all crops, and the light showers which occurred during the latter part of the week were insufficient to afford ma-

terial relief. PRECIPITATION.

The rainfall was greater than usual over the interior of the Atlantic Coast States and over the greater portion of the Lake region and the Spring-wheat region. Showers, generally light and well distributed, occurred elsewhere, except in portions of Arkansas and west Tennessee, where heavy rains occurred. Although the rainfall was less than usual near the Atlantic Coast line, the

The total absence of rain in California intensifies the drouth conditions in that State, which have already proved injurious to growing crops, the telegram of last week reporting the grain crop almost a total failure in the southern part of the State.

The following telegrams give the general crop conditions and the effects of the weather upon the same from the several States, based upon reports received during the week from about 10,000 special correspondents:

Cultivation of the Teasel.

A very important branch of the agricultural industry of New York State is the cultivation of the teasel, that essential to the "fullers'" trade, for which as yet all mechanical ingenuity has failed to devise a substitute. It was not until quite recently that the growing of the teasels in the United States has been conducted upon a paying basis, and our domestic cloth manufacturers were obliged to secure their supply from France, England, Belgium, Austria, Poland, and the Crimea, where teasel culture has for years occupied a position of prominence. In France there are over 6,000 acres devoted to this industry exclusively, and the annual yield is valued at close to \$5.000.000. Of this quantity some \$2,000,000 worth are necessary for home consumption, and the rest, upward of 60,000 tons, are exported. The teasel, or, botanically, the Dipsacus fullonum, is a burr weighing about as much as an ordinary burdock. The prickles of the teasel have a small knob at the end, and this is mounted on an elastic stem, and set with great precision on the central spindle, which, revolving, claws the surface of the cloth and raises a nap.

Chean Music

We will send a number of the New York Musical Echo, containing 32 large pages of the best music written—songs, selections from operas, waltzes, etc.-upon receipt of the below, and seven cents This is a rare chance to get a large quantity of the best kind of music at a nominal price.

AMERICAN FARMER.

Washington, D. C. Inclosed find 7 cents, for which send

NOTE-We cannot send any particular sor

SPECIAL TELEGRAPHIC REPORTS. New England.—Weather very favorable; pr pitation heavy in northern New Hampshire an

peaches.

New Jersey.—A very favorable week for plowing, seeding, planting, and growing. All growing crops much improved by the warm showers of Friday and Saturday.

Pennsylvania.—Conditions favorable for growth and planting. Winter grain looking well and grass getting a good start; oats and potato's seeding well advanced; fruit prospects improving.

and grass well advanced; fruit prospects improvence of the seeding well advanced; fruit prospects improved wheat and all growing crops; corn being planted; preparations being made for large acreage of tomatoes; tobacco plants generally in good condition; a prospect of some early peaches and fair yields of other fruits.

Virginia.—Weather tavorable, except too cool since Friday; rainfall generally below the normal, and more needed; growing vegetation improved; corn planting rapidly progressing; tobacco plants scarce in Noison and Louisa Counties; prospect for late apples improved.

North Carolina.—Very favorable week, with temperature above normal until 22d and frequent showers latter part; unusually large acreage of corn planted; some cotton up; small grains, especially wheat, greatly improved.

especially wheat, greatly improved.
Carolina.—Good growing weather gendry; cotton and corn planting progressing ly, with good stand where up; grains and products improving; prospects more ening.
ia. - Weather favorable for planting, but

shows tair stands and is being plowed; wheat has improved greatly.

Florida.—Showers Friday revived crops in northern Counties, but were too light elsewhere to materially relieve severe drought; all crops need rain; young oranges dropping badly.

Alabama.—Very favorable week, except cool nights of latter part; much progress made in all work; considerable cotton planted; corn, oats, and wheat are doing well; out worm in vegetables in some places.

Mississimi.—Temperature below powers, sup-

and wheat are doing well, out worm in vegetables in some places.

Mississippi.—Temperature below normal; sunshine deficient; rainfall abundant; heavy showers at close of week probably injurious; cotton planting increased; corn growing rapidly; gardens, pastures, and meadows doing well.

Louisiana.—Generally favorable week, except too much rain in northeast parishes, which retarded work; cane doing well; worms injuring corn in some parishes; cotton doing well; rice planting progressing rapidly. anting progressing rapidly.

Texas.—Precipitation below normal, except

Texas.—Precipitation below normal, each over southeast portion; temperature above normal; weather favorable for farm work, cotton planting has been pushed; corn has been plowed over and is in fine condition; wheat damaged by fly in some localities.

Arkdusas.—Planting delayed by wet, cool makes meanly all early corn planted; some nat week; wheat, grasses, and vegetation improving; corn planting in progress; some corn coming up; cut worms increasing and very destructive to corn; tobacco plants doing nicely; pastures improving steadily; strawberries doing well

ustures improving steadily; strawberries loing well,
Kentucky.-Cloudy and cool, with excessive by wet soil: tobacco plants promise well; good properts for smaller fruits.

Missouri.—Greater portion of week too cold and cloudy for growing crops; rainfail badly listributed; wheat and late sown oats look

Illinois.—Rainfall above average; temperature normal; sunshine below average; rains beneficial to all vegetation, but sunshine needed for rapid advancement; wheat improving, and is generally reported in good condition; oats, gardens, and grasses making slow growth; some corn planted.

Indiana.—Weather more favorable, warm.

with rain, very beneficial to when and grass, but rains prevented corn; fruit in bloom, injured less pated. West Virginia.—Soaking rains re tation considerably and condition, but interfered planting and oat seeding; proved; fruit prospects b

roved: true lamage reported.

Ohio.—Warmth, with show canced condition of wheat o cancel potatoes; and carry planted potatoes; about completed, and some plant.

about completed, and spects improving.

Michigan.—Temperature abshine and rainfall below; good until last of week, when cerop growth and farm work advanced and some early ground being prepared in so Wisconsu.—Weather favour of farm work; seeding the seeding of the seeding of

arly sown wheat beg for corn advancing: 1 Iowa.—Temperatur

n and killed

Oklahoma.—Sunshine and rainfall normal an Oktahoma.—Sunshine and rainfall normal at temperature below; wheat growing rapid corn, oats, grass, and vegetables growin slowly; cotton planting begun; plowing ear planted corn.

Montana.—Cold, wet weather of early par week was followed by higher temperature a abundant sunshine; planting about complete. in extre

Seeding and planting nearing

idano.—Secuing and planting near tion; warm rains last of week impre and gardens; weather conditions triets during past week remarkably Colorado.—Conditions very favors in extreme eastern portion, when too dry and growth slow; some Arizona.-Temperature and sunshi

Arizond.—Temperature and sunsume : normal; no rains during week; haying in ress, good crop; excellent fruit prospect ports are generally encouraging.

Utah.—Forepart of week cold: frequent ers in northern portion, but very dry in sections; crops have grown well in the portion; bariey is coming up; oats not ye Washington.—Fine growing weather; with plenty of sunshine and less rainful preceding wock; plowing and seeding tions very active; all crops looking well.

Orgon.—Favorable weather conditions valied throughout week, except damaging peets continue; activity in farming operations.
California.—Continued drouth and dryins
winds affected seriously the outlook for grain
hay, and pasturage; fruit and nut crops slightly
injured by frost; cherry crop extraordinarily
good.
MARK W. HARRINGTON, Chief of Bureau.

Andrew Gustafron, a rich farmer of Porter unty, Ind., has been advertising for about wo years for a wife and has had lots of tron-April 17 he was married to Miss Olive Carlson, of Lincoln, Neb. He had previously entered into an engagement with a Chicago woman, whom he jilted on finding out that she was a grandmother. She has against him for breach of promise. She has begun suit

NEW PUBLICATIONS.

ADVERTISER'S HANDY GUIDE. Compiled and Published by Bates & Morse Advertising Agency, New York. 766 pp., 44 x 62. Flexible covers. Price \$2.00

The tenth issue of the Advertiser's Handy gressive, up-to-the-times, opportune. itures of previous issues, of rangement, statistics of circulation of all prominent daily and weekly journals, the grouping of special publications, are reproduced in the present volume. The principal change is in the careful revision which establishes the authority of the handy volume. Journal of Education, Boston.

SPRAYING CROPS. Why, When, and How, By Clarence M. Weed, D. Sc., Professor in the New Hampshire College of Agriculture and Mechanic Arts. Second (revised) edition. New York: Orange Judd Company. Price 25 cents. The large first edition of this practical

andbook having been exhausted in b two years, the present second edition is published. It is larger by 20 pages than the first edition; has been revised throughout and brought up to date in every way. The introduction discusses the following subjects: Crop enemies; spraying against insects; feeding habits of insects; development of parasitic fungi; the philosophy of spraying; insecticides used in spraying; fungicides used in spraying; combining insecticides and fungicides; cost of spraying materials; prejudice against spraying; spraying apparatus; cost of spraying; profits of spraying; spraying and the weather; spraying trees in blossom; pruning trees; a spraying calendar; spraying pre-

Notable articles to be expected in the May Overland are "Egypt To-day," by Hon. Jerer of " Egyptian Sketches' 'The Palmistry of China and Japan," by Prof. Stewart Culin, of the University Pennsylvania, the first article on that subjection rennsylvania, the instances of that subject in the English language; "The Collie in Mendocino," a beautifully illustrated paper; "The Nicaragua Canal," by Lieut. Winn, U. S. A. (military advantages), and Capt. W. L. Merry, Consul-General of Nicaragua (po

litical aspect); "King Solomon's Mines," by Rounsevelle Wildman, the editor, a Malayar sketch: "The Chinese Six Companies," by an educated Chinaman, intended to correct much popular misunderstanding; and "More Rambles on the Midway," a continuation of the elaborately illustrated Midwinter Fair articles. When a paper serving a chosen line of read-

ers appears filled with interesting reading matter, and crowded advertising columns, congratulations are in order. The 21st anniversary edition of the Philadelphia Cash Gracer fills the bill in every particular, and is a credit to its owners and publishers. The Burk McFetridge Co. have by earnest, pe hard work acquired for this paper an enviable but entirely deserved popularity. success continue. Journal of Proceedings of 22d Annual Ses

sion of the Vermont State Grange, P. of H., from D. D. Howe, Secretary.

A Remarkable Book.

Clapp & Co., Bankers, Mills Building, New York, have issued a volume, handsomely up, containing all their weekly market letters for the past year, together with a great amount of other valuable information, arranged in an asily-referred-to way. It contains 32 pictures including buildings occupied by 24 exchanges, history and data of 11 others.

Quantity and Government values of nearly all nature's American products, grown, In or fished at points of production; also, expe

Prices daily at speculative centers, like Chicago and New York. Storage capacity, rates, and who controls

inspection at grain centers. Where England buys food products yearly, what they pay for same, amount bought, what

hey grow, and price yearly.

Quantity of wheat, rye, barley, and oats grown in the world annually, home con-sumption, exports and imports and population of 28 wheat producing countries.

Immigration and destination of immigrants a 1893. Amount of gold and silver coined yearly and since American mints were es-Movement of cotton daily in 1893 at sea

ports, weekly at 24 interior towns, where grown or spun in the world, yearly price and quantity grown.
Stocks, bond and interest tables, bank

stocks, and clearing house records.

Prices of silver yearly for 60 years. Page 237 shows the 1893 shrinkage equalled be cost of the Civil War.

Have received your paper all right, and must say that it is truly an excellent agricultural journal.-A. FORBEST, West Superior,

THE GREATER CONGRESS.

Farmers Discuss the Topics Which Interest Them.

Hard Times.

EDITOR AMERICAN FARMER: I am no politician, nor do I profess to be versed in political economy. It seems to me the trend of the arguments used to explain the cause for our present trouble is more for the purpose of bamboozling the farmers and common laborers in order to get them to support a pertain party, or patronize some party newspaper, than to reveal facts.

In this article there may be some scattering ideas but seldom expressed. for which I may be termed a saphend; but that will not change the facts in the case, or my opinion. I do not believe that either Harrison's or Cleveland's Administration, the McKinley Bill, or any other bill, has had as much to do in bringing about our present troubles as other causes.

First, I will state some things as I see them in this part of the country (East Soon after the war coal mines began to open, furnaces began to spring up, railroads and other public works; men from the farms rushed to the public works, and the farmers had to change their plans for want of laborers. The consequence is, we now buy not less than three-fourths of the flour we use from other States, more than half of our pork, about half of the hay, Irish potatoes, and sometimes a part of the corn used, especially in the cities or at public

After awhile our railroads were completed, crossties all furnished, tanbark near the railroad all shipped; then the furnaces and factories began to close down, perhaps the most of them, like the one in this vicinity, with thousands of dollars' worth of their products unsold; thus the coal mines must stop or greatly reduce their output. So it is, thousands of men have been thrown out of employment, and if the maladministration of the Government has had anything to do with the trouble, it is so remote that I confess I am too shortsighted to see it. Thus I presume it is, to an extent at least, over the greater part of the United

Let us take into consideration the item of farming utensils. In this part of the country, only so far as my knowledge extends, I believe there is enough to supply the farmers for 10, or perhaps 20, years to come, and I suppose it to be so all over the country, and the factory yards crowded. Perhaps the manufacturers have money enough to enable them to continue operations, but they are too wise to do so, knowing the demand is not sufficient to pay them for so doing. They cannot afford to pay the price for labor now that was paid years ago, when they received for their goods 25, 50, and for some articles even 100, per cent. more than at the present. For nstance, a mowing machine that sold for from \$75 to \$90 can be bought for from \$30 to \$40, notwithstanding the laborers demand the same or strike for higher wages. Thus it is we have come to to be done? It is useless to stand and fight an insuperable i arrier. The labor-DAVIDSON, Malta, Mont. with starvation wage current '96.—A. careful selection of stock. "Hence I say that wool with the farmer, but it is much is received much is required," and have spent their wages as fast as received. Thus they are debarred from engaging in other business. The farmers cannot furnish all employment, nor could they feed them, were they disposed to do so. Their provisions must come from a distance (at best the greater portion), with but little money to bring it.

How much has Congress or the President had to do in bringing about such a state of affairs? Or what kind of a tariff law can possibly affect much in the way of relief? From youth to old age we are prone to blame others for our troubles. In this case we readily agree with Solomon when he said, " When the wicked beareth rule the people mourn," admitting this to be true in our case. Our rulers have not been placed over us by some supernatural or foreign power, over which we, as a Nation, had no control; and in this matter how many can conscientiously plead "not guilty"? Perhaps I may in a future article attempt to point out other causes .- BENJ. J. Mc-DONALD, Coulterville, Tenn.

"Best and Quickest Way to Raise the Mortgage."

EDITOR AMERICAN FARMER: In the first place we will take the man upon a small farm of 80 acres, who has a family and fairly fixed, with enough horses and tools to run the farm. I would suggest to that man, and his wife also, to have a few certain rules to go by, and then try and live as close to them as possible. In the first place, a man with an 80 acre farm must adapt himself to that amount. He must not overstock it, so that he cannot do anything well. Keep one good team and either a span of brood mares or a span of colts, that will improve by Keep from 4 to 10 good cows, and instead of having three dry nine months in the year, have them give milk 10 months in the year. See that they are properly housed, fed and cared for, to produce the greatest amount of milk and outter. Decide what breed of hogs to keep and stick to that breed. Keep 10 to 15 brood sows, and should you have bad luck in the Spring with pigs, breed so as to have a second litter in September. Arrange your debts so that you wont have to feed all your shoats off in the Winter. Feed part so as to have some to sell most every month, but have the main part of your pigs fattened in the pasture in May, June, and July. Always make it a point to have something to sell off the farm every week in the year. Instead of having a large store bill in the Fall or Winter, try and buy what your family need with butter, eggs, poultry, potatoes, etc. I think a farmer should live largely J. H. Bourne, Hellens, Md.

upon the products of his farm, have good garden, and so arrange it that it can be worked with a horse. Take care of the little things and the mortgage will soon melt away. Have your mortgage with an option of paying \$100 or any multiple thereof on any interest pay day, and when you sell a bunch of hogs try and arrange so the bulk of that money can go towards paying off the mortgage. Take care of your farm machinery; there are enough binders and valuable machinery standing out and rotting now in this and adjoining Townships to pay off

several large mortgages. The 80-acre farmer should not try to handle too many cattle, but keep lots of bogs, and by raising clover you can raise hogs and corn upon the same farm. A man with a 160-acre farm can keep more cattle, and should raise all his calves and keep them in a good, thrifty, growing condition until ready to turn

One point I wish to make before closing: Don't try to pay off the mortgage on speculation purely; that is, buying feeding cattle in the Fall, buying corn and hogs to follow them, then pay interest upon the money. I am afraid that would be a very good way to raise the mortgage, instead of paying it off .- C. P. WALKER, Greene County, Iowa.

A Mountaineer's Ideas. EDITOR AMERICAN FARMER, the

friend of every working man and farmer:

While perusing THE AMERICAN FARMER

to-night I came to Mr. Geo. Buchanan's letter against protection. He says that high protective tariff and the demonetization of silver have caused all of our hard times. Different here, my brother. The people of America never knew what hard times were until the tariff deformers commenced with their free trade olicy. I for one have suffered, but, thanks be to the Giver of All Good, I have been able to get enough to keep my dear wife and children from starving. Not so with every one here, and I am told by one that came from the Eastern States the other day that the suffering for want is appalling in the extreme. Again he (Mr. Geo. Buchanan) says that the more protection they have the poorer the farmers are getting, and if they have high protection much longer they will be tenants and slaves. My surmise is that if the Wilson Bill passes the farmers will be neither tenants nor slaves, but paupers." He does not see why the laboring man should pay five cents on a dozen of eggs. I presume he means five cents tariff. My friend, you did not think about the depreciation of from 25 to 30 per cent. of the workingman's wages, all through your free trade leaders. Could not the workingman afford to pay more for the few eggs that he would require, and get a wage equal to the amount of his labor? He would not have to attend the free trade soup houses. How does Mr. Buchanan pay a tribute to the shoe manufacturers, when hides have been on the free list for some years past, if I remember right. You do not have to pay a bounty on sugar. If you will only try to raise it, and succeed, the Government will pay a bounty to every one who is successful in the enterprise. Workingmen and farmers, vote for those who will give us protection, and down where the way is blockaded. What is with starvation wage cutters. You can

The State of Washington.

EDITOR AMERICAN FARMER: Not seeing much correspondence in your excellent paper from this State, I take the liberty of dropping you a line.

Location, 22 miles due east of Seattle,

on S. L. S. & E. R. R., adjacent to the farfamed Snoqualmie Falls (hight, 268 feet). Principal crops, hops, oats, barley, potatoes, peas, and hay; also almost all kinds of orchard fruits, save peaches; and nature's hand has planted the entire State into a general small-fruit garden, some variety of which we have on our table fresh and green every day in the year. First comes strawberries and currants, followed in close succession by salmon berries, raspberries, blackberries, buckleberries (blue and red), and Oregon grapes. Then the native cranberry, that holds good until strawberries arrive the following Spring.

Yet, with the foregoing appetizing bill

of fare, our enterprising farmers and orchardists are not content, but have introduced almost all of the highlyimproved varieties of the aforesaid fruits, which seem to thrive and produce as though natives of the State, principal of which I mention a variety of blackberry known as the Evergreen, so named from the fact that it retains its green foliage throughout the Winter. The crop commences to ripen about August, and continues to produce abundance of fruit till | grade. shut off by extreme cold weather. Berries very large and luscious, hang in immense clusters. As soon as one cluster disappears another takes its place. The vine is hardy, of tremendous growth, and would, I think, thrive in almost any

part of the Union. I have now a vine that has been transplanted only two years that started six vines from the root last Spring that are now almost as thick as a man's wrist, and 27 feet long. From five hills of these berries I make all the wine I need for my own use, being a widower 80 years old, living all alone on my 160marsh farm. I have some roots that I will not use, and should any of your subscribers wish to experiment with them, write me and I will take pleasure in forwarding them to their address, thus being enabled to distribute to others that which is a pleasure to me .--

WALTER FULLER, Snoqualmie, Wash. The Worst of All.

EDITOR AMERICAN FARMER: We have had a nice Winter, also measles in abundance, and lots of other insignificant difficulties; but the effects of the Wilson Bill are the worst of all .- CAPT.

THE TARIFF.

An Abstract of Some of the Most Important Argu-

ments.

SENATOR PEFFER'S SPEECH.

The speech of Senator Peffer, of Kansas, which was concluded April 13, began with a which was concluded April 13, began with a severe denunciation of the burden of taxation which oppressed the people. Coming to the details of taxation, he declared that it was only partially true that the consumer paid the tariff duties. On some articles he did, and on some he did not. He paid the duties on sugar, for instance, but not on nails, which were sold here cheaper than in Great Britain, though there was a duty of one and onequarter cents a pound on them.
"Take agricultural implements. We make

agricultural implements cheaper here than they are made anywhere else in the world. not tell an American plow from a European plow in the dark by simply feeling it. foreign plow is clumsy; it is heavy; it is awkwardly made. It is the same with the wagon. You hitch a team of horses to an American farm wagon, and you can ride off to the neighboring village with your wife and your family at a good round trot without tiring your team, but you could not do that with British wagons, which are made for heavy soil. A fine wagon made at the Bristol works in England will cost you from \$115 to \$120—that was the price three or four years ago, though it may now be a little less than that-and the ordinary farm wagon that no American farmer would use if he could pos-sibly avoid it—and he can as long as he lives in this country—can be made for about \$60, while ours are made at from \$50 to \$55. "You may go along from a steam thrasher down to a hand rake and you will find the

our price and not theirs governs."

The Senator said that the Wilson Bill discriminates against the farmers, and gave the following table of instances:

than that made in England. We supply

Articles.	Present law, with ad valorem equivalent in per cent.		Wilson Bill	
Bacon and Ham	2c. per pound. 5c. per pound. 3c. each 5c. a dozen 11 to 12c. per pound	25		
Butter Cheese Hay Onions Po atoes Vegetables Poultry, live. P'ltry, dress.	30c. per bushel 6c. per pound. Do. \$4 per ton 40c. per bush. 25c. per bush. 3c. per pound.	65 33 43 25	Do. Do. Se a ton 20c. per bush. 10c. per bush. 10 per cent 2c. per pound.	

He paid particular attention to the item of eggs, giving figures which have heretofore appeared in THE AMERICAN FARMER as to the enormous importations of these, and the countries whence they come.

He claimed that the bill did not reduce

taxation; it simply transferred it, and generally to the prejudice of the farmers. THE WOOL DUTIES.

The Senator protested strongly against taking the duties off wool and leaving them on cloth. He wanted free trade for all or for It was absurd to call wool raw mate-

"The successful wool grower of to-day is an he is an engineer, and he is a workman. That is the way in which we have produced our wool of the present standard—by careful improved our breeds by

"Hence I say that wool is not a raw material with the farmer, but it is a finished product, and our present quantity and quality has been brought about by a long series of very careful and studious work."

" (Joung into details, here is a statement from the wool growers giving the items as to the capital invested in sheep, the capital invested in farms and the number of flocks and flock-

	masters, and so on.	
	Capital in sheep	\$120,000,000
	Capital in farms and barns for sheep	400,000,000
	Number of flocks and flockmasters	1,000,000
	Number of men employed a portion	
	of the year	100,000
١	Wool produced, pounds	320,410,542
		80,000,000
	Value	
	Number of sheep	45,000,000
	Value of sheep sold for pelt and food	30,002,000
	Amount paid in wages	25,000,000
	Value of services of flockmasters	50,000,000
	Cost of washing and shearing sheep.	5,000,000
		80,000,000
	Total amount paid for labor	00,000,000

"Farmers do not object to a reasonable pro tection on manufactured goods. They are willing that duties shall cover difference in cost of production where any such difference But they are unable to understand how such compensating duties operate advantageously to manufacturers and disadvantage ously to farmers. They do not see the of the argument which insists on a high tariff on woolen goods to protect manufacturers against cheap labor in Great Britain, and which at the same time asserts that the far who produces wool does not need any protec-tion against cheap labor and cheap land in the production of wool that competes in his own He knows that in Australia wool is grown on and that costs but a trifle in the way of rent; that sheep are raised there in vast number for the wool alone, and that the actual cost of producing good wool is much less than what t costs here to produce an article of equal

'All he asks is fair treatment." THE SUGAR INDUSTRY.

The Senator went into a long discussion of the sugar matter, and the benefits that would accrue to the country from the growing of our

Germs

of disease feed on life, and are only overcome by the making of sound, healthy

Scott's **Emulsion**

the Cream of Cod-liver Oil, is an easy, palatable fat food that makes new tissue quickly and gives strength. Physicians, the world over, en-

dorse it. Don't be deceived by Substitutes! Prepared by Scott & Bowne, M. Y. All Druggists.

own sugar. He favored a bounty rather than a duty. He concluded this part of his argu-ment as follows:

"It has been demonstrated that sugar-bear ing sorghum will grow in more than half the States of the Union and mature well. But there is one trouble with reference to the plant, and it is the same with respect to beets to at least nearly the same extent. It is easily affected by frost, and it will require the protection of large sheds and warehouses, so that the crystallizing material will not be injured by frost. It has been shown that good sugar-producing plants are grown in California, Colorado, Kansas, Michigan, Mis-souri, Nevada, New Mexico, New York, Ohio, North Dakota, Oregon, South Dakota, Virginia, Washington, Wisconsin, Wyoming, and

"It is a business, as I said in the beginning." that must be established out among the farmers. A sugar manufacturer cannot remove the beets from Kansas and Nebraska to on, Mass., or to New York, or to Pateron, but he must bring his factory right there where the beets are grown. Southern States are progressing rapidly. After they began to build their factories out among the cotton planters, and to build their furnaces and their rolling mills in the midst of iron and coal mines, they found they could produce cotton cloth and pig iron as cheaply as they are produced anywhere in the world and much cheaper than they are produced in any other

portion of this country.
"Now, the sugar manufacturing business must go out among the farmers. So here is an industry (and that is a strong point I make for my people) in which the farmers can pro duce what is called raw material and have it manufactured right in their midst with a community of farmers around the factory; and at the rates at which beets are selling to such factories, and at the rates at which manufacturers can afford to pay, the farmers can make a good living off of 10 acres of land, and in addition to that they can buy the land and pay for it out of the proceeds over and above their living. If we are ever to arrive at a system of small farming, without waiting until we are forced to it, here is a voluntary American article not only better but cheaper method. Here is an opportunity for the to beablt mankind by home market and more than that, and hence benefiting the small farmers around them.

and I plead for them.
"I plead for the overcrowded wheat farmer and the overcrowded cattle farmer and the corn farmer and the cotton farmer. Here is an opportunity to establish an industry the product of which is needed, constantly needed, among our people. There is a great open-ing, and that would benefit the farmers greatly. I am not asking for any benefit to the manufacturer; but I have shown that it is utterly impossible for the farmers selves to build these factories. We bring among us men who can supply the capi-tal; and that being so, those men must understand that they are not to compete with the cheap sugar of Germany, France, and Austria, or they will not build their factories.

SENATOR SMITH'S SPEECH.

April 17, Senator Smith, of New Jersey, made an exhaustive argument against the in-come tax feature, which he denounced as socialistic, anarchistic, unpopular, un-Democratic, and un-American.

"And where, may I ask, if begun, shall such concession end? An income tax of two per cent. can only serve to whet the appetite of insatiate socialism." What next? The free silver coinage and sabineasury plans of the Populists or the abolition of Presidency, Vice-Presidency, and Senate demanded by the Socialists? A two per cent, tax will appear, as the Senator from Indiana has said, "a very small and trifling matter compared to others more serious." What are those others more serious? And how soon must they be expected? If we are really confronted by the specter of communism, we may as well understand the situation that we may be prepared to meet it. Do those who indulge in these vague premonitions of social disaster really appreciate and believe the full meaning of their words? Or are they willing to take the risk of encouraging incendiarism only in order to carry their point? Which position do they wish to assume—that of promoters of disorder and class hatred, or of demagogues eager to curry favor with the physically indolent and

mentally deprayed?

"This is not Democracy. It is cowardice and folly. If disapproval of such a tendency involves the reproachful designation of 'conservative,' then I am a conservative. The true Democratic party stands to-day between and above the class rapacity and greed en-gendered by Republican legislation and the unbridled license and unreasoning prejudice of the unsuccessful. It is charged with the responsibility of preventing, by the exercise of wisdom, prudence, and courage, the clash of these opposing elements. And it has the power to perform its full duty, because be-hind it, greater and stronger than all other combined, is the sturdy common sense

of the American people.

"It would be as distinctly a betrayal of trust to yield to the one element as to yield to the other. The Democratic party has no the many than to tax the many for the benefit of the few. And yet that and nothing else is the avowed purpose of this proposition.'

SENATOR M'LAURIN'S SPEECH.

April 17 Senator A. J. McLaurin, of Mississippi, delivered a purely rhetorical har-rangue against protection, without giving any real facts or figures, either new or old. It vas merely declamation.

SENATOR MORRILL'S SPEECH.

April 18 Senator Justin S. Morrill, of Vermont, criticized severely the inconsistencies and falsities of the Wilson Bill. With refrence to the agricultural schedule, he said: 'The tariff portion of this bill makes its destructive purpose prominent by an assault upon each and every production of the farmer. It cuts the jugular of sheep husbandry by consigning wool to the free list and to the tender mercy of free trade. American wool growing in competition with the cheap labor and cheap pasturage of Australia, Africa, and South America must perish. Even the long-wool sheep for mutton are likely to be mainly by Canada. With the removal of 10 cents duty per pound on clothing wools the flocks upon our thousand hills will disap-pear. The good shepherds who have invested more than five hundred millions of capital to uphold this industry and to gain a modest support will find themselves caught in a tariff thicket to be offered up as a sacrifice to a

Democratic theory only.

"The fact that wool, under protection from 1892 to 1893, there was an increase in one year of 31,000,000 pounds, conclusively proves that it is entitled to continued favor. The further fact that from a well-grounded fear of the hostile legislation now impending here, the decline in the total value of sheep from Jan. 1, 1893, to Jan. 1, 1894, was from \$125,909,264 to \$89,186,110, or showing a shrinkage, according to the Department of Agriculture, of \$37,000,000 is only a foretaste of the final fate of weed even in the country of the final fate of weel, even in the country where the annual product now stands the third largest of the world. The large demand for foreign wool to supply the home deficiency for foreign woof to supply the home defected will create peremptory demands for gold to balance the adverse foreign account.
"Wool is not only about to be slaughtered,

but it seems foreordained by the Sangrado Democratic leaders that no interest or product of the farmer shall escape being bled by the bill reported. Grain of all kinds, cattle, horses, sheep, hogs, lard, butter, cheese, milk, flax, hemp, hay, straw, eggs, and poultry are all to have something of their prosperity with-drawn, either by the total loss of protection drawn, either by the total los or by a radical reduction of tariff duties love our Canadian neighbors much better than ourselves. No wonder that the hilarious Tory leader there should tell his people that the Wilson Bill 'gives Canada all she wants without surrendering anything.'
"I do not forget, while wool is to be free, that mungo and shoddy are to have the pro-

tection of a 15 per cent. duty. This may exclude the mungo and shoddy, but it will not exclude the low-grade shoddy woolen cloths, which are to be subject only to an ad valorem duty, without the specific duty on weight which has heretofore successfully served to shut them out. The Wilson Bill, therefore, will be likely to furnish the dumping ground for a large share of the most worthless shoddy goods of Europe.

goods of Europe.

"But, as if it were not enough to cripple the home market of the farmer, this blindeyed tariff bill proposes to abrogate all reci-procity arrangements by which farmers and others secured for their products a broader and valuable market abroad. The sudden and splenetic abrogation of all these arrange-ments with foreign nations cannot fail to shock their good will and seriously affront our own people."

SENATOR PERKINS'S SPEECH.

April 19 Senator Geo. C. Perkins, of California, discussed the various ways of raising the \$500,000,000 a year necessary to carry on the Government, and supported the McKinley plan as the ripe result of 30 years' experience. He strongly opposed the Wilson Bill as destructive of the great interests of his State—agricultural, manufacturing, and min-

ng.
California exported, chiefly to the East, california exported, chiefly to the East, in 1892, 112, 749,200 pounds of fresh deciduous fruit, 69,715,000 pounds of citrus fruit, 59,432,661 pounds of dried fruit, 53,336,960 pounds of raisins, 110,574,420 pounds of canned fruit, and 4,126,605 pounds of almonds and walnuts. The development of these industries which have afforded these exports that he been edided by representing which exports has been aided by protection, which should be enlarged rather than diminished. As the production of the semi-tropic fruits in our country has increased the price has de-clined and the consumption kept pace with that our oranges, lemons, figs, raisins, currants, olives and olive oil, almonds, and walnuts are equal in quality to the best and superior in general to the like products im-

But California contends at a disadvantage with the old and populous country of the Mediterranean, of cheap labor, low rates of interest, and cheap transportation. Over mountains and deserts the California products must be carried but notwithstanding icts must be carried, but notwithsta these hardships the east is supplied with fruit of better quality and lower rates than for merly, when the foreign market had the monopoly. Yet, with this great product not one-fifth of the people of the United States enjoy the luxury of semi-tropic fruits and nuts. We ask that the prevailing duties on these be not disturbed, and that the bill under consideration be so amended that these indus tries may continue to develop and increase.

The home production of semi-tropic fruits

appears to have largely increased their con-sumption. Formerly rare and costly luxuries, they are coming into more common use and we may look forward to the time when they will become common but cheap luxuries to all classes of people. That this is a desideratum devoutly to be wished no one will deny, and it may be accomplished under just protection. The value of olive oil imported in 1881 was \$480,683 for 384,412 gallons, and in 1891, under an increased duty, was \$876, 613 for 733,489 gallons.

In the meantime the production in California has largely increased, and is now marching on to a busines of great magnitude, olive orchards being planted in every section of the State. Pickled olives were imported in 1891 to the value of \$320,163. This commodity is proposed to be placed on the free list. California given protection will supply the demand with a better article, and in time at less rates. The importation of dried prunes has averaged 60,000,000 pounds annually during the past seven years. California produced in 1886, 2,000,000 pounds, and in 1892, 25,000,000 pounds, the consumption steadily increasing as the good quality of the California product becomes known, at the ame time lessening the price to the consumer.

There was imported into the United States

in 1892, 23,250,809 pounds of raisins, and California in the same year sent to the Eastern markets 53,336,960 pounds. This fruit is still classed among the luxuries, used only by the more wealthy, but under the stimulus of home production is advancing to common use and becoming a necessity in the household. But not one-tenth of the amount is consumed that will be under the full development of American production. Let the encouragement of American production continue, and all the various sections of our country, the Atlantic Coa-t, the great Valley of the Mississippi, the mining region of the Rocky Mountains, and the high plateaus will all be supplied abunwith a better article and at cheaper dantly American production of raisins, as of other delicate fruits, means prosperity to large American communities and adding an increased ratio to the aggregate American wealth, in this, that it saves to the people for circulation and mutual assistance what would otherwise go abroad not to return in any form, and that it gives to capital investments for its money, to bankers activity in their exchanges, employment to labor, freight for transportation, markets for manufactures and far products, building up cities, communities,

Bold and enterprising men have engaged in these productions, investing large sums of money and the toil of years until now tens of thousands of people and millions of dollars are represented. A vast amount of wealth has been added to the country, and comfort and luxuries given the people. To establish this nd to advance it protection was necessary, and no free trader nor pessimist can show that it has worked any hardship in America. In fact, in this case, protection has proved an unexceptional blessing. The duty upon the mportation of raisins and other semi-tropical ruits should be retained as established in the ariff of 1890. This also affords the opportunity to increase the revenue where foreigner will pay for the privilege of com-peting in the market. The high prices we have paid for these delicacies have enriched the landowners of the Mediterranean countries at the cost of our stores of the precious

metals. These may be called some of the specialties of California and the list be greatly enlarged. Of these specialties, citrus fruits, figs, raisins, nd nuts, we imported in 1891 to the value of \$15,062,208, and in 1892 to the value of \$11,237,285. This was so much money sent abroad that could have aided in passing over the period of hard times if it had been retained at home in exchange for home products of the same class. The encouragement of the cultivation of these fruits opens another source of business for our people. This is in the preservation of fruits for exportation. This also implies the encouragement of sugar pro-

Statistics show that Great Britain consumer annually per capita 70½ pounds of sugar, while but 55 pounds are used in the United States. It is also known that the table con-sumption in the United States greatly exceeds per capita that in Great Britai in the latter country is used in the preservation of fruit and the making of the various commodities, as jams, jellies, and other articles of which fruit is the basis. This indicates the enormous business now

existing in England in this line, and what a great industry may be developed in our own untry by the encouragement of the culture of fruit and sugar.

SENATOR GALLINGER'S SPEECH. April 20 Senator J. H. Gallinger, of New Hampshire, said, with reference to the agri-

cultural schedule: The bill under consideration plays havoc with the interests of New England farmers,

and promises to forever wipe out the men who are struggling to sustain themselves on the rocky farms of New Hampshire. Under the present law our farmers are reasonably pros-perous, finding a market for their surplus products in the manufacturing cities and vil-lages of the State. They are necessarily

brought into competition with the farmers of Canada, where labor is cheaper and the soil more easily tilled. Notwithstanding the high duties on hay, apples, potatoes, eggs, etc., considerable importations were made from Canada during the past year, and now it is proposed to put many of our leading farm products on the free list, and to materially

reduces on the free list, and to materially reduce the duties on others.

"Look at the record. Under existing law the duty on bacon and hams is 5 cents per pound; broom corn, \$8 per ton; cabbages, 3 cents each; cider, 5 cents per gallon; eggs, 5 cents per dozen; lard, 2 cents per pound; milk, 5 cents per gallon; green peas, 40 cents per bushel; straw, 30 per cent. ad valorem; tallow, 1 cent per pound, and wool grease, ½ cent per pound. All these are to go on the free list. Reducing specific to ad valorem duties, the reductions made on live stock and products of the farm not put on the free lis re as follows: Horses, from 30 to 20 per cent.: cattle, from 50 to 20; oats, from 40 to 20; barley, from 65 to 30; butter, from 33 to 20; heese, from 42 to 25; beans, from 40 to 20 hay, from 43 to 20; onions, from 50 to 20; potatoes, from 52 to 30; other vegetables, from 25 to 10; apples, from 34 to 20; live poultry, from 32 to 20; dressed poultry, from 54 to 20, and starch, from 84 to 30. "This means disaster to the agricultural interests of northern New Hampshire."

PETITIONS AND BILLS

Introduced in Both Houses of Congress for the Interest of Agriculture.

SATURDAY, APRIL 14. By Mr. Cousins: From 40 citizens of Jones ounty, Iowa, against sale of imitation dairy

MONDAY, APRIL 16. By Mr. Dalzell: From Grain and Flour Exchange of Pittsburg, Pa., against the Hatch Anti-Option Bill.

TUESDAY, APRIL 17. By Mr. Silby: From citizens of Mercer County, Pa., for issue of legal tender money

for good roads.

By Mr. Gorman: A bill to transfer the U.S. Commissioner of Fish and Fisheries to the

THURSDAY, APRIL 26.

By Mr. Sherman: From C. H. Blackstone and 23 others, of Sanquoit, N. Y., for the bill regulating sale of dairy products. By Mr. Russell: From citizens of Lebanon,

Conn., for the same.

By Mr. Boutelle: From citizens of Abbott, Me., for the same,

A NEW DIVISION

In the Department of Agriculture. Asnew Division has been created in the Wea-

ther Bureau of the Department of Agriculture, to be known as the Division of Agricultural It will be the duty of this Division to supplement the present work of the Weather Bureau by continuing the study of the rain-fall and temperature after they enter the soil, and to keep a continuous record of the moistre and temperature conditions within some of

the most important types of soil in the country. Rain is of little benefit to plants until it enters the soil where it can be absorbed by their roots. It is extremely important, therefore, to continue the study of the rainfall further than has heretofore been done, and to keep a record of the amount and distribution of the moisture and temperature within the In the humid portions of the United State rain falls, on an average, for two or three con-secutive days, and is followed by an interval

f eight or ten days of fair weather.

has to offer such a resistance to the descent of this rainfall that a sufficient quantity of water may be retained for the use of crops during the fair-weather period. It should not, however, offer too much resistance, as this would interfere with a free circulation of air within the soil. The actual conditions of air, moisture, and temperature which soils are able to maintain largely determine what classes of plants are adapted to the soils. The relative amount of moisture maintained by different soils for the use of plants, and the relative temperature of soils, depend very largely upon their texture, so that, even with the same rainfall and exposure to heat, different soils may maintain very different conditions. This difference in the meteorological onditions under the surface has an important bearing upon the adaptability of soils to crops, because of the influences on their development, yield, texture, quality, vitality, and

ime of ripening.
It shall be the duty of this Division to es tablish the meteorological conditions maintained by important types of soils, like the early truck lands; by the soils adapted to the several grades of tobacco and to the different varieties of cotton and fruit; by wheat and corn lands; and by the soils of the arid and semi arid regions, where the duty of water is so all-important.

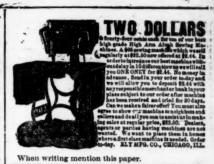
The simple record of moisture in the soil from time to time will be of great interest and have a wide practical application to agri-culture. It is difficult to tell from the rainfall table whether the season has been favorable or otherwise for the crops, for so much depends upon the distribution of the rainfall and upon how it fell that it is impossible to A record of the soil moisture, however, will show directly how much of the water has been available. When the conditions favorable to lifferent agricultural interests are once estab lished and when the conditions maintained by different types of soils are known, a basis will be provided for the classificatin and valother lands for different classes of crops and for the more intelligent improvement of lands.

The meteorological conditions within the soil which are unfavorable to certain kinds of plants may be extremely favorable to others, and may thus offer advantages for special agricultural interests which cannot be carried on in other soils. For this reason the early truck crops of the Atlantic Seaboard are confined to a very narrow strip of soils of peculiar texture, which a few years ago were lying out as barren wastes, not being adapted to the then staple crops, wheat and corn. They are now the most valuable lands of the Eastern States when devoted to early truck. The same may be said of the bright tobacco lands of the South, which were so poor that they were generally left out as barren wastes, until it was discovered that they were adapted to this particular interest. They give a texture and color to the tobacco which cannot be produced on other soils. The texture of the lands and the meteorological conditions they maintain force the truck crops to a quick and early development, and give a fine texture and bright yellow color to the tobacco when

it is properly cultivated and cured.

This adaptation of certain soils and localities to special crops and agricultural interests may be seen in all parts of the country, and is very largely due to the ordinary ata meteorological conditions, and to the relation of the different soils to these conditions. This relation of the soils to the rainfall and heat has as a rule far more effect upon the crops than the difference in the chemical composition of the soils, for all soils have a large excess of plant food over and above the requirements for even very large crops.

Stations will be located in the most im-portant established soil types, where records will be kept of the soil moisture and temperature by the regular or volunteer observers of the Weather Bureau, or when these are not properly located for this work, by others who may be interested in the work. It is hoped that the experiment stations, the agriculture colleges, the State weather services, and other nstitutions and individuals interested in this line of work will co-operate as the invest

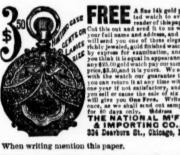


Action of Ammonia Phosphate.

The first effect of ammonia phosphate: s to produce a most luxuriant braird: each plant tillers or forms stems to such

an extent as almost to have a bushy appearance, and if no check follows, the luxuriant growth continues, and a very large crop is produced. But a check is: not unlikely. Soon after the brairding, the plant may assume a sickly, yellowish appearance, and the prospects of any? crop at all seem doubtful. Without t any treatment, however, it may survive, the sickly appearance may disappear, and a good crop may after all be produced; nature, as a rule, contending successfully with such obstacles to growth. But it is evident that the plant has been checked by the injurious action, and that better results would be got if it could be avoided, while it might often happen that the injury might not be only temporary, but that the plant might succumb. The injury has now been found to be due to phosphoric acid set free by the decomposition of the ammonia phosphate, and apparently not required at that stage. And the remedy has been found to be an alkali; not any alkali, for lime has not been found to effect the purpose, and soda in a doubtful and partial way, but a special alkali, viz., potash used in the form of alkaline potash carbonate. It does not, therefore, seem to be a case of simple neutralism, but of maintaining a condition in the plant that only potash can maintain.











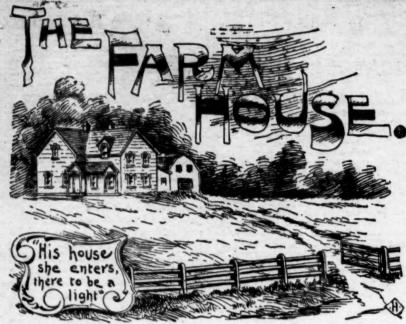
TO FARMERS AND HORSEOWNERS. "The Horse From Birth to Death."

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When writing mention this paper.

When writing mention this paper.



Give Me the Baby.

Give me the baby to hold, my dear— To hold and hug, and to love and hiss, Ah I he will come to me, never a fear— Come to the nest of a breast like this, As warm for him as his face with cheer, Give me the baby to hold, my dear.

Trustfully yield him to my caress.
"Bother," you say? What! a "bother" to me?— To fill up my soul with such happiness As the love of a baby that laughs to be Snuggled away where my heart can hear Give me the baby to hold, my dear.

Ab, but his hands are grimed, you say,
And would soil my laces and clutch my hair—
Well, what would pleasure me more, I pray,
Than the touch and tug of the wee hands

The wee hands there, and the warm face here— Give me the baby to hold, my dear.

Give me the buby! (Oh, won't you see?
Somewhere, out where the green of Is turning to gray and the maple tree
Is weeping its leaves of gold upon
A little mound, with a dead rose near

Give me the baby to hold, my dear!

—James Whitcomb Riley.

About Women.

THE YOUNG women of Columbian University, here at Washington, are trying to raise \$2,000, with which they intend to found a "Lucy Stone Scholar ship." This will aid other girls to obtain a college education, who would otherwise have to do without.

LIZABETH BARRETT BROWN-ING, whose poems all women who have read them love, was a remarkable original Greek, and her poem, "The Battle of Marathon," an epic in four books, was written when she was 11 or

FOR THE first time in the history of the County, a woman of Rockford, Ill., was placed on the list of petit jurors, and that was purely an accident. Miss Alice Schmauss is her name, but it appeared in the tax list as "Al Schmauss," and the supervisor mistook it for a man's name. Her friends urge her to appear for duty. * * *

SOME YOUNG women of Washington have formed themselves into a Fortnightly Club for the purpose of reading newspapers carefully and discussing current topics. Each member makes a re port at each meeting on some topic previously assigned her, and as a result they can now discuss intelligently tariff, finance, Coxey, and all the weighty subjects which now trouble the masculine side of the public mind.

SADIE BARCLAY, of Saybrook Conn., deserves to have her name recorded among the brave. She was on board her father's sloop bound for Middletown with a load of clams. Both she and her father were knocked down by the swinging of the boom and the latter had his leg broken. Though the girl's right arm was so badly sprained as to be useless, she sailed the vessel 20 miles across Long Island Sound in the face of a "norther," and anchored at the mouth of the Connecticut River. It took her from 5 in the morning until 7 at night. She sculled ashore in a small boat, with her arm in a sling, and went for a doctor. When her story was known, her stock of clams was soon sold out.

On Many Subjects.

Be as courteous to the children as if they were "grown up," and take it for granted that they will return the treatment. It is a hardened child, indeed who will not yield to this form of kind-

If you go away from home on a vaca tion, be extra careful of your little valuables in the way of jewels or money. Never lock them in your trunk or leave them in your valise. The best place for them is in a small bag fastened securely to your belt.

If you have any kind of musical instruments in the house, play for the children every evening after tea time. Encourage them to sing. Make it a custom of the household, and it will come to be one which they will remember with pleasure to the end of their lives.

There is something very beautiful in a little tribute found on a tombstone in an obscure country churchyard. "She was so pleasant!" was all it said; but how much that tells. Neither brilliant, wise, rich, nor famous, but only "pleasant," a something within the reach of us

Points About Pins.

Thorns were originally used in fastening garments together. Pins did not immediately succeed thorns as fasteners, but different appliances were used, such as hooks, buckles, and laces. It was the latter half of the 15th century before first manufactured in England the iron wire, of the proper length, was filed to a Let come to a boil, putting in your rags, or noint, and the other extremity twisted as many so dye will cover them. Let them into a head. This was a slow process, and 400 or 500 pins was a good day's work for an expert hand. The United

first machine for making pins. This was in 1824. The inventor was one Lemuel Wellman Wright .- Ladies' Home Journal.

EASHION'S FANCIES.

Aprons.

Small girls, and big ones, too, look prettiest and cleanest when they wear aprons over their stuff dresses. At any rate, this is usually what mothers think, though the larger girls, when they reach their teens, usually protest against wearing them.



A change from the ordinary kind is shown in the cut. It is becoming and not very difficult to make, and is parinfant prodigy when a child. At 10 ticularly pretty when made of fine musyears of age she read Homer in the lin, combined with dainty embroidery or lace.

Concerning the Overskirt.

The overskirt is with us again in all its fullness and unnecessary homeliness. One of its mildest forms is shown in the



The woman is sensible who keeps to her plain, full-gored skirt, especially when she has to be her own dressmaker. A saving of goods and of labor is well worth the defiance of so worldly a being as Dame Fashion, and there are plenty of unworldly 19th century women who are undauntedly lying in wait for her. The gown shown is of challie, and it would make up well in any durable wash goods, such as gingham or batiste.

A Flowery Talk.

EDITOR AMERICAN FARMER: I would say to those who grow chrysanthemums, do not keep them in pots during the Summer, but set in beds as soon as all danger of frost is over. The soil must be very rich, however. Give them plenty of water, especially soap-suds, from the laundry, and pinch them back from the time they are set in the bed until July 1. This will make them bushy and supply ample stalks for buds. The first few osts will not damege the plants, but they hould be potted in the latter part of September, in boxes or pots, with plenty of room for roots, bringing them into the bouse nights, and on fine days give them the outdoor sun-shine; water with liquid manure occasionally. In this way you will be surprised at the hundreds of lovely flowers that will greet your eyes, and no other flowers will last such time without fading as the chrysanthemu When they are through blooming, set them in a dry cellar until next year, when, with a little cutting back, they may be set out in the beds, or may be started from cuttings the latter part of February and treated the same as directed above. If I see this in print, will write more about geraniums, roses, etc.— KATHERINE FOLEY, Thorp, Wis.

Something They Will Prize.

EDITOR FARMHOUSE: Tourist or yachting shirts, if well made and of a good quality of flannel, will usually be very acceptable. You can buy a good pattern of any size, from 11 to 17 inches (neck measure). A very pretty and durable flannel may be purchased for 50 cents a yard. It washes beautifully and may be obtained in any shade. The stitching should be done with silk. You will not find them hard to make, and the gentleman will prize them more highly because you did the work. -MARY.

EDITOR FARMHOUSE: For coloring carpet rags fast black with walnut peelings, take about one bushel of the peelings and cover the latter half of the 15th century before with water, boil one hour so as to gather all pins were used in Great Britain. When of the substance from them, after which skim out the shells and strain the juice, put back in kettle and add two ounces of copperas. boil well until they are the desired shade; take them out with stick and hang to dry. work for an expert hand. The United States has the credit of inventing the MARY MAUDER, Sumanville, Ind.

HOUSE-CLEANING POINTS.

Pansy Tells How to Make Order of

EDITOR FRAMHOUSE: Even the men who grumble most at house-cleaning time like to see a clean, orderly house. For my part, I prefer one who does this to one who is cross when things get a little out of order on wash

Don't begin house cleaning in muddy o rainy weather, unless you live along the coast where it is always raining. Have all you

where it is always raining. Have all your dresser and bureau drawers emptied, brushed, and aired; neatly fold or pack the contents. If you do this before you begin the regular house cleaning, you will find it a great help, and by taking one or two drawers a day, you will hardly miss the time.

On a bright day have the mattress carried out to sun. Should you be so fortunate as to possess a feather bed, hang it, with the pillows, on the clothesline to air. As a general thing, feathers should not be hung in the sun, as it tends to draw the oil out and gives them a bad odor; but one day's sun will not hurt them. Remove every piece of furniture from the room and cover with old calico or flour sacks. The pictures may be laid, face from the room and cover with old calice or flour sacks. The pictures may be laid, face dow, in a pile on the floor, or set in the corner of an unused room. Be sure they are firm, so-none will fall and be injured. All bric-a-bac should be well dusted, placed in boxes and tightly covered till ready to put back in place. With a little care there is no necessity to get anything broken. necessity to get anything broken. After everything has been taken out of the room but the carpet, take your tack lifter and, beginning at the door, remove every tack, saving the good ones. Then gather the carpet up in a bunch, carry out of doors, hang on the clothesline, and give a thorough beating up in a bunch, carry out of doors, hang on the clothesline, and give a thorough beating with sticks; whip and shake till no more dust flies when you strike it. No woman, unless she is very strong, should attempt to dust a carpet alone; try to have this part of the work come at noon, and get your hus band to help you.

band to help you.

If there are any grease spots on the carpet,
a little ammonia and a generous supply of
elbow grease will successfully remove them.
Now, wrap an old soft cloth around the broom and brush or wipe every inch of the ceiling and sides of the room, changing the cloth as

often as it gets soiled.

Next comes the cleaning of the wood work.

If it is hard-oil finish, clean with weak cold tea; if it looks dull, polish with a dressing of one part raw linseed oil and two parts turpentine. For painted wood, use a little animonia in the water, or a very little of any good nia in the water, or a very little of any good soap for the dirty places.

Clean the windows with common whiting

it is so much easier than the old way, and jus as cheap. Moisten a cloth, dip it in the whi ing, and rub all over both sides of the window thoroughly; let dry, and rub off with a clean cloth, and your windows will be polished as well as if you spend a half hour rubbing them vith paper and kerosene.

Now, if the room is papered and the paper

s good with the exception of being dirty, hat may be remedied; take a small loaf of that may be reincured; take a shall load of rye bread, moisten it with very little water, then work and knead it till it gets spongy and leathery, then wipe your paper till the ball of dough is dirty, then you must stop and knead it till all the dirt is worked into the ball. A fair sized room may be cleaned in this way with two or three balls, but you must be sure to work the dirt in so it won't soil the paper. Long before you get through with your home made sponge it will look like an old black rag. If the paper has become so soiled that it cannot be cleaned, set a boiler of hot water in the room, have the doors and windows tightly closed, and in a short time the steam wil have loosened the paper so it may be easily removed, and the wall newly papered.

Right here I want to say a word in favor of cheap paper; if you select paper with a modest little pattern and a trifle of gilt in it after it is on the wall it would take an expert to tell the difference from the higher priced paper.

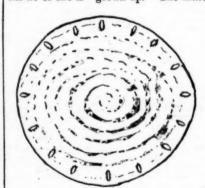
The carpet comes next; use carpet felting or

several layers of newspapers under the carpet After the carpet is tacked down sweep i lightly, then arrange the furnishings to suit Do not put everything back in the same place it was before, but try a change.

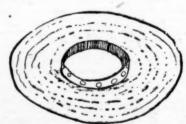
Whenever my carpet gets to looking dirty, I take commeal siftings, dampen and sprinkle over the carpet, then I take the broom and just scrub it. Try ft, sisters.—Pansy, Luther,

Pretty Garden Hat.

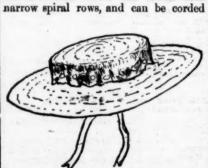
With a little extra trouble and an easy-running machine, a pretty sun hat can be made for the baby that will last till he or she is "grown up." The mate-



rial should be firm, heavy goods, such as pique, which can be starched very stiff. The cuts show the two circular pieces. By experimenting with a newspaper you



can get the size. Sew a little band inside the brim and set thickly with white cloth buttons which match the buttonholes on the edge of the crown. The hat is stitched round and round with



between the rows. It is very easily laundried, and should be ironed on the wrong side. If the brim "wobbles," it is all the more becoming to a little bobbing head.

Harvest Drink.

One quart of water, one tablespoonful of aifted ginger, three heaping tablespoonfuls of sugar, and one-half pint of

WOMAN'S WISDOM.

Healthful Talk-Some Rules All

Might Regard to Advantage.

EDITOR FARMHOUSE: Cleanliness is next to Godliness "; how, then, can we expect to enjoy health of body or mind if we are constantly disregarding the demands of nature and the laws of God? We should insist upon having our cellars well wentilated, and all decaying vegetables at once removed. All drains from the sink should be kept scrupulously clean by scalding water in which salveds has been dissolved.

soda has been dissolved.

Sesspools are another trap in which typhoid fever, dyphtheria and other contagious diseases have their birth. Pure water is an essential; typhoid fever and cholera are often traced to impure water. The late Dr. Parks, of England, once remarked: "When a man dies of typhoid fever, some one ought to be hanged." Dr. Kellog says: "Some one ought to be educated."

to be educated."

Cupboards and refrigerators should be kept free from all stale or moldy victuals. What cannot be used up at once had better be given the hens or pigs than be set away to breed disease. The slop pails should be emptied and scalded with sal-soda water and left out to air each time than are more.

Houses should be well aired, and especially is this true of sleeping-rooms. Thousands of lives are annually sacrificed by breathing the poisons and overheated air of bedrooms. How many farmhouses there are that are never aired only as the outside door is opened duraired only as the outside door's opened dur-ing the day as the inmates pass in or out. This is all wrong; the beds should be well aired each day. On getting up in the morn-ing throw all the clothes back over the foot-board, and open the window, leaving it open until after breakfast, when you are ready to make up the beds. ake up the beds.

A housekeeper may be a model of cleanli-ness in her home, and yet feed her family on such rich viands that she will be obliged to have frequent access to the family medicine chest. Here, too, we need to be educated. The question is not what is best for my health, but rather what do I like best to eat. Nature says be temperate.

The present is emphatically an age of in-

temperance. Men are addicted to the tobacco, opium, and drink habit, while women are oughtlessly fostering those habits in their sbands, sons, and brothers by their mode of highly-spiced cooking, such as mince pies, fruit cake, etc. These create a taste for liquor. We allow our growing boys and girls to drink strong tea and coffee at 10 and 12 years, and thus wonder why it is they are

Feed your children oatmeal, cracked wheat hulled corn, brown bread, rice, cornstarch, custards, fruits of all kinds, and especially baked apples. Give them plenty of pure water, sweet milk, fresh air, and clean bodies properly clothed, and my word for it they will repay you in sweeter disposition, heal-thier bodies, and less sleepless nights. Much might be said on this subject, but I will only

might be said on this subject, but I will only give you a few rules for health.

Breathe only pure air, drink only pure water, eat only pure-food, take sufficient muscular exercise, pieserve proper attitudes, discipline the mind by proper mental exercises, take proper rest, recreation, and sleep. Give attention to personal cleanliness, and be temperate in all things.—A FARMER'S WIFE.

Agreeing With Miss McCullough.

EDITOR FARMHOUSE: An extract from Miss McCullough's paper, read before an Iowa Farmers' Institute, on "Education of Farmrarmers' Institute, on "Education of Farmers' Daughters," pleased me much; but one of the best reasons for needing a good education in a farmhouse she did not give. It is, that the more book knowledge one has and the greater love for it the better one is able to entertain one's self when isolated from congenial society, as' so often falls to the lot

In the absence of convenient high schools, which Miss McCullough yet hopes for, why cannot our Farm Institute solons, who have cannot our Farm Institute solons, who have already done so much for the uplifting of both women and men on the farm, arrange a series of cheap text-books for home study expressly for the use of farmers' daughters? Not only along the lines of gardening, poultry raising, and household economics, though these are very interesting topics, but give us a bit of political economy, some physical culture, etc., and some extracts from great repeat for our mental refreshment while washing dishes, pulling weeds, packing butter, or mending stockings. For if one's hands are well drilled they will follow accustomed work mechanically, leaving the mind almost en-

tirely free to follow other lines.

Many writers speak of farmhouse drudgery as if that were the only drudgery in the world. Do they not know that whatever work is distasteful to the worker become drudgery to that worker, whatever it may be, and that it can be found in every walk of life by either sex?

Now, I want to prote t against two things. One is, such very slender and unhygienic waists in farm paper fashion illustrations. The other is against the serving of so many courses and the using of so many "individ-ual" dishes by the hostess, whether on farm or in town, who is also cook and maid-of-allwork. Aside from other and weightier considerations, the lack of "the fitness of things" in one woman trying to do with one pair of hands what her finer or more prosperous neighbor needs three pairs for, seems too apparent for common sense.

I am so glad to see THE AMERICAN FARM ER indorse the rural free mail delivery; it so just a measure and already too lo layed .- JANET MCKERWIN, New York.

EDITOR FARMHOUSE: I fully agree with the writer who said that the woman's department of the paper is apt to be dull and uninteresting. Why is it one of the best farm papers in New England with a fine crop o writers and every advantage, has allowed the 'All around the table' to become silly and uninteresting? Because nearly all those who write sense are thrown aside, and article kissing and writing to unknown persons, and various like subjects fill up the space.

several years, and enjoyed the work very much. There are always some writers who harp on love, which may answer for a little time, but becomes tiresome. I think good, lively letters on practical subjects are what make such a department interesting. The readers of an agricultural paper are widely separated and can bring to the editor rich treasures either descriptive or educational. Every writer should have in mind the best good of the reader, and all articles should be

rofitable to some one to read.

My home is in a hill town in Central Connecticut; there is pleaty of beautiful scenery, hills and valleys; but while we feast our eyes on nature we lose much from being at a distance from city or village. Although the iron corse may not come within our borders, yet the daily mail brings us tidings from the outside

Those who live on the farm seldom consider Those who live on the farm seldom consider the fact that they feed the world. What would become of every other business in the world if the farmer had nothing to sell? The cry of the day is overproduction. Some think if the farmers produced less, higher prices would prevail. True; but how many would suffer for the use of the necessaries of life! The poor find it hard enough at the best.—MRS. H. B. CARTER, Wolcott, Coun.

FREE TO INVALID LADIES.

A lady who suffered for years with uterine troi isplacements, leucorrhea and other irregular inally found a safe and simple home treatment

TALKING IT OVER.

Washing Machines - Patterns - Woman's Rights, Etc.

DOESN'T LOOK WELL IN BLUE.

Mrs. M. Windenburg, Lamont, Iowa, thinks that a farm, if properly managed, makes a farmer's wife the most independent woman in the world. She says: "I would like to make the world. She says: "I would like to make the acquaintance of the woman in a blue calico dress. I wish she didn't urge every farmer's wife to wear blue. Now, I don't look well in blue. I wear black-and-white or black-and-ed calico gowns. Some way, I never could feel neat in a Mother Hubbard. Every time I raised my arms the waist got longer and the skirt shorter. When I make a dress I make one skirt and two waists. The skirt is made to button to the waist and a skirt is made to button to the waist, and a skirt is made to button to the waist, and a gathered belt of the same does service for both waists. One waist may be made with pleats back and front, and the other with bretells. Two waists and one skirt will keep me respectable for a week. But, sister, I have a blue-eyed, golden-haired boy, 18 months old, and he doesn't wear anything but blue calico for every day. That "new use for a barrel" came just in time to help me. I had been planning what to do with the soiled clothes from one wash day until the next, but hadn't made up my mind until I next, but hadn't made up my mind until I heard from Kentucky. Will some sister that has canned meat for Summer use, report success and give recipe?"

THE BRIGHT SIDE.

Mrs. J. F. H., Swampscott, Mass., believes in eating plenty of fruit in season, and using it for dessert, because then there is no trouble about preparing pudding and the like. Time is saved, which can be used by the mother for reading and little social duties, for extras in the line of cooking usually fall to her. Mrs. H. says further: "I feel like adding something to the bright side of the help question, for I have passed through an experience when a faithful girl proved a treasure. With a family of eight to do all the work for, she managed to get the meals on time, and to carry us to get the means on time, and to carry us through the season on a farm, in spite of many interruptions, which were cheerfully endured. When I think over it all, I feel that, next to a sympathetic and kind husband, I have a warm spot in my heart for this help-ful assistant during a siege of ill health."

WHICH ARE MOST TIRED? Mrs. J. F. H., Swampscott, Mass., says: "In spite of all that is written in behalf of tired-out farmers' wives and their lives of toil and drudgery, I wonder if the sickest of

them are any more tired of life than their ex-tremely fashionable city sister."
"Kansas Reader" sends in some "Chick-

en Chat," which will appear later. She lives in a country where the women folks are the most interested in chickens. She adds that the men are too, when it comes to the eating She says she is the milkmaid, market man

hay raker, potato digger, and the mother of a little blue-eyed girl who tears her dresses, and so she is going to turn her chicken mone into a sewing machine in the Fall.

WASHING WITH A MACHINE.

Mrs. E. H. Condit, Bristol, S. D., has washing machine, and says she finds it very satisfactory in hot weather. She heats a pail full or two of hot water at night and makes quite a strong suds; then dips each garment into the suds to thoroughly wet it and wrings out, putting the finest clothes into the machine to be washed first, and the others into different vessels to stand through the night. In the morning she heats a boiler full of water very hot and pours in the machine, and while washing everything through that water heats another boiler full just as hot—boiling hot would be best-and washes everything through that. Then she has a large tub of bluing water and rinses well, and the washing is done. Some pieces may need rubbing

AN INCOMPLETE EDUCATION.

Mrs. G. K. H., South Haven, Mich., says "Recently I chanced to spend a few days at the home of a friend who does her own work; at the same time a 16-year-old Miss also shared her hospitality. The young lady was pleasant, bright, a high school student, but it did not seem to occur to her that, under the circumstances, it would be fitting for her to make the bed in which she slept, or to care in way for her room.

"Now, is not the education which gives a knowledge of all else save the scriptural injunctions to bear one another's burdens and to treat others as we would wish ourselves to be treated, lacking in that which is most essential if we wish our children to be truly happy, and to promote the happiness of those touch theirs?"

SHE WILL SEND PATTERNS.

Mrs. R. A. Osborn, Ipswich, S. D., writes "I wonder if all mothers who read this de-partment dress their babies after the reform method. To those who still use bands or skirts and pin around the waist, I would ad vise never to do so again, for the reform method is such an improvement on the old method that when once used they will never return to bands. The waists and skirts are cut in one piece, so there is no danger of getting baby's clothes too tight or pricking with pins, for they button in the back with small pearl buttons. If there are any who would like patterns for baby's suit, I will willingly send them for postage."

A MOST EXCELLENT IDEA.

Mrs. John Tucker, Westport, Ind., believes that farmers' girls would be more likely to want to stay at home if father would sometimes give them and mother a dollar a piece to spend just as they please outside the absolute necessities for clothes; or, what is better, give each one something to care for and age and a certain thing to provide, with the proceeds all left over to be their own. This would provide some practical busineducation which most women sadly need.

A DAIRY MAID.

Francette, Oakland, Me., has lived for the past six years on a dairy farm, and has made in that time about 10,000 pounds of butter. She says: "I second Mrs. Waters's motion in March 15 issue. I have lived in the State of Washington, also in Nevada, so when I see a Western signature it seems like an old ac-

TWO THINGS SHE WOULD LIKE. Hattie M. Stephenson, Hooker, Ind., writes "I wish to ask some of the readers of your valuable paper to send a good recipe for fruit cake, one that is not too expensive. Also, me one tell me where I can get a good

book on housekeeping, cooking recipes, LIKES THE IDEA. Joe's Wife, Valparaiso, Ind., says she is specially interested in the Farmhouse Department. She likes the idea of giving won voice in the paper, because it seems like giving her her rights. She makes numbers of fancy articles, and will tell her sisters how to

THE PATTERN JUST FIT. "A Farmer's Wife," Brandy Station, Va., wishes to thank Henry's wife for the little stocking pattern. She tried a pair for her baby, and they fit just right. She also sends ome nice recipes, which will appear later.

pretty inexpensive rugs.

Two Good Suggestions. EDITOR FARMHOUSE: Add a tablespoonful of ammonia to one quart of water, to clean windows and woodwork, and save "elbow

Put one ounce of camphor gum into three ounces of sweet or olive oil, and it makes one of the best remedies in the world for sore throats, soreness through chest and lungs caused by colds, burns, and chillblains. Heat it before applying, or heat a fiannel and put over the parts bathed.—A. B. METCALF, Townsend, Vt.

For the Home Table.

ORANGE FRITTERS.

Two cups of milk, three eggs, one and one-half cups of prepared flour, six sweet oranges peeled, sliced, and seeded, pinch of salt. Make a batter of the eggs, milk, flour, and salt. Dip into this the slices of orange, and fry them in boiling lard. Drain in a colander on white paper and eat hot with a sauce made by creaming two tablespoonfuls of butter in a cup of sugar and flavoring with lemon juice.

TOMATO BISQUE

Put one quart of stewed tomatoes and one pint of hot water in the kettle; when ready to boil add one-half teaspoonful of soda; after it foams up strain, pour back in the kettle, thicken with one table spoonful of flour, add one tablespoonful of butter, one teaspoonful of salt, and s little pepper, and serve with crackers split and crisped in the small oven which can be put on the stove a few moments for that purpose.

CHOCOLATE BLANC MANGE.

Put a quart of milk on to boil, dissolve half a package of gelatine in cold water and add to the milk with a teacupful of sugar and two ounces of grated chocolate; take from the fire, flavor with a teaspoonful of extract of vanilla, pour in a mold, and set aside to harden. Serve with whipped cream.

CREAMED EGGS AND BACON.

Boil six eggs hard and cut them in slices. Arrange on a platter and pour over them a cream sauce made by stir-ring a teaspoonful of butter rolled in one of cornstarch into a cup of boiling milk and cooking until it thickens, and seasoning with pepper, salt, and minced parsley. Arrange thin slices of bacon fried to a crisp around the edge of the platter.

OATMEAL COOKIES.

Two and a quarter cups of flour, two and a half cups oatmeal, one cup butter, one cup sugar, two eggs, two tablespoon fuls of milk, one small teaspoonful of oda, one teaspoonful of cinnamon. Roll thin and bake in quick oven. These are very nice with coffee or for school lunches.

FROZEN PUDDING.

Take one pint of rich milk, the yelks of four eggs, and mix together. Make a sirup of one pound of sugar and a pint of water; put on fire, let come to a boil, stir in 40 blanched almonds pounded fine, a quarter of a pound of chopped citron, two ounces each of raisins and currants, one ounce of candied orange and lemon peel, and a glass of grape jelly. Mix with the custard, pour n a freezer and freeze.—LOTTIE WELLS Great Bend, Kan.



CROCHETED ROSE. EDITOR FARMHOUSE: These make a pretty idy. Join the roses with some pretty stitch

Make a chain of six stitches; join in a ring.

1st row—1 te, separated by 3 ch on each of
the 6 stitches of the foundation,
2d row—1 de, 3 te, 1 de in each of the spaces between the treble in the preceding

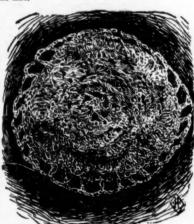
3d row-1 dc, separated by 6 ch between each scallop of the preceding round. 4th row-1 de. 5 te. 1 de under each 6 ch.

5th row-1 dc, separated by 8 ch between each scallop.
6th row—1 de, 7 te, 1 de under each 8 ch.

7th row-1 dc, separated by 10 ch between each scallop.
8th row—1 dc, 9 tc, 1 dc under each 10 ch. 9th row-1 dc, separated by 12 ch between each scallop.

10th row—1 dc, 11 tc, 1 dc under each 12

Care must be taken up to this point not to make the chain stitches loose, or the rose will



11th row-1 tc. 14 rather loose ch. repeat. These trebles must be put in the back of the scallop at slightly irregular distances, so as to make 7 trebles in row instead of 6, as

12th row-1 dc, 13 tc, 1 dc under every 14 13th row-1 sc, separated by 3 ch on every 3d ch of edge.

14th row—1 tc, 1 ch, repeat.

These trebles must be fastened in the top of

ast scallop behind every single crochet of 15th row-1 tc, separated by 2 ch between 15th row—1 tc, separated by 2 ch between every treble of the preceding row.

16th row—1 tc, separated by 3 ch between every treble of the preceding row.—Mrs. G. Manning, Lodi, N. Y.

LEAF AND VINE LACE. Cast on 28 stitches.

Cast on 28 stitches.

1st row—K 3, n, k 2, over, k 1, o, n, o, n, o, k 2, n, k 4, n, k 2, o, k 1, o, n, o, k 1.

2d row—Seam back, as on all even rows.

3d row—K 2, n, k 2, o, k 3, o, n, o, n, o, n, o, k
2, n, k 2, n, k 2, o, k 3, o, n, o, k 1.

5th row—K 1, n, k 2, o, k 5, o, n, o, n, o, n, o, k
2, n 2, k 2, o, k 5, o, n, o, k 1.

7th row—K 6, n, k 2, o, n, o, k 1, o, k 1, o, k 2, n, k 2, n, k 1, n, k 2, o, n, o, n, o, k
2, n, k 2, n, k 1, n, k 2, o, n, o, n, o, k
2, n, k 2, n, k 2, o, n, o, n, o, n, o, k 3, o, k
2, n, k 2, n, k 2, o, n, o, n, o, n, o, k 5, o, k 1, n 2, k 3, o, n, o, n.

k 1, n 2, k 3, o, n, o, n.

12th row—Seam back and begin at first (K, knit; o, over; n, narrow.)-PANSY,

Everly, Iowa. Magic Paper.

EDITOR AMERICAN FARMER: To prepare tracing paper used for transferring embroidery patterns or impression of leaves for herbariums, take lard oil or sweet oil mixed to the consistency of cream with any of the following



Pure, Soft, White Skin.

Have you freckles, moth, black-h dotches, ugly or muddy skin, eczem, tetter, or any other cutaneous blemis Do you want a quick, permanen solutely infallible cure, FREE O to introduce it? Something nev mild and so harmless a child ca drink it with perfect safety. If a your full Post-office address to

MISS MAGGIE E. HILETTE, 134 Vine Street, Cincinnati, AGENTS WANTED EVERYWHERE. When writing mention this paper.

blue, lamp black, Venetian red, or chrome green. This should be rubbed with a knife green. This should be rubbed with a knife on a plate or stone until smooth. Use rather thin but firm paper; put on with a sponge and wipe off as dry as convenient, then lay between uncolored paper or between newspapers, and press by laying books or some other flat article upon them until the surplus is absorbed, when it is ready for use.

For taking of patterns of embroidery, place.

is absorbed, when it is ready for use.

For taking of patterns of embroidery, place
a piece of thin paper over the embroidery to
prevent soiling, then lay on the magic paper,
and put on the cloth you wish to take the
copy on to embroider, pin fast and rub over
with a spoon handle, and every part of the raised figure will show upon the plain cloth. To take impressions of leaves on paper, place the leaf between two sheets of this paper and rub over it hard, take out and place between two sheets of white paper, rub hard, and you will have a beautiful impression of both sides of the leaf or flower.—MARY CALLAHAN, New Richland, Minn.

WOOL CASHMERE COSTUME.



This suit is made in proportion to bust me and length of skirt 32 to 44 inch bust. It is and will be supplied within 10 days after order. It is made of wool cashmere trimme

UNION CHEVIOT SUIT.



The biggest bargain of the season. A boy's suit of Union cheviot with extra pair of pants and polo cap. Single or double breasted, in blue or black, well made and excellently finished. Sizes 4 to 14 years. Cannot be duplicated for the money. Sent, post-paid, to any address in the United States for the extremely

low price of \$2.50. WATERPROOF OVERCOATS.

The Mackintosh Brought Within the Means of Every One.



one-half the usual retail price. The offer is I two colors and two grades, and to sizes (bust ment) ranging from thirty-six to forty-six leach coat is fifty-three inches long, with a d cape twenty-four inches long, of double-textuce in the lining being a handsome plaid. They are fine materials and in the best manner. They grow hard or stiff, and are first-class in every. The dark-blue coat is of very fine cloth, ri all wool, but very handsome, and the price delivery to any express office in the United \$8.85.

18.85.

In taking size of bust, measure over the coat over which the mackintosh is to be worn.

The black coat is made from a fine wool, smooths surface cloth, that is less showy than the blue, but will give the best of service. The price, including delivery to any express office in the United States, is \$9.55. Coats of different sizes will be made to order for its extra. Address.



outer. chapel door, and a those curls of hers." stream of cold air flowed gathering about the stove. peter out well." "Nancy Bell ain't out to-night, is she?" asked one of them, a stout, good-natured woman in

Her neighbor had a sallow, muchwrinkled, complaining face. She shook her head significantly, holding her warmed woolen glove against her

Tye heard she was failing considerably lately," continued the other. sh! don't speak so loud.

hasn't ever got up from the grip last Winter. I shouldn't be surprised if she didn't last long. He don't realize it. it ain't likely-men ain't apt to." An old man in a faded brown over-

cont, on the other side of the stove, stole silently away to the door. It seemed to Daniel Bell that it had grown colder in the last hour.

What had those women meant by speaking of Nancy like that-as if it had been anybody? If they'd lived with her more'n 40 years, as he had, they wouldn't have talked that way.

discouraged and given up; but she had smart, Nancy was.

The borse turned into the yard of his It looked sweet as a peach." own accord. Daniel unharnessed him with stiff fingers. The barn was warm, and had a clean, dry smell. Daniel was careful of his horses.

at him with her usual smile, but through the dazzling lamplight which made the

Mis. Bell was a pretty little old it in his wife's lap instead. woman whose cheeks still wore a little of their old-time color. The softened look in her black eyes had not been there in earlier days. She was knitting a stocking. Daniel drew his chair to the other side of the table and opened his weekly paper. But he was not read-He was using the paper as a cover behind which to watch his wife; the feeble back, still held upright in her chair; the cough choked back now and then: the busy hands. Something in those presently made him say, hesitatingly:

Naney "What say, Dan'1?"

wouldn't knit any longer to-night, if I was you."

"Why, I want to get these stockings done. Twon't be long 'fore you need | coming.' 'em." Her voice was still brisk and

"I guess I could make out to buy acarted attempt at pleasantry.

"Well, I don't intend you shall have o wear out any slazy boughten stockags while I live!" she answered.

The newspaper rustled in Daniel's printed page stared at him in their "While I live!" Everything struck the same chord to-night. He breathed hard. Even to himself he could not think in words. It was all summed up in one articulate feelingto move Heaven and earth to keep Nancy with him a few years longer.

It was Daniel's regular custom to build the fire and set the kettle boiling before Nancy got up. When she entered the kitchen next morning she found not only a full wood box, but a pile of freshly-split kindlings and a brimming pail of water standing in the sink.

"Why, what under 'lection?" she exclaimed to herself; "brushed up the stove hearth, too-an' if he aint gone an' ground up coffee enough for three or four days! It ain't so good when it's kep'. Well, I sha'n't tell him"—and after the old couple had had their comfortable breakfast together, and Daniel to-day, Naney," she remarked in a casual tone, "It won't take me long to get my work done. I sha'n't have to stir round a great deal, I guess, everything's fixed "thank you."

evening, a smile moved around the cor-

"What you so pleased about, Dan'l?" Nancy finally inquired.

Daniel turned toward her, and laid his spectacles on the table.

"I was thinking about old times. should see you home, an' you says ' No, off, and you hadn't gone three steps be ore you fell right down on the ice ker-

"Beats all!" said Daniel, in some ad-Beats all!" said Daniel, in some admiration. "Girls are queer creatures, you was a girl?" take 'em whichever way-so are women most women," he added, with a touch

HE THURSDAY EVEN- "You was a good deal taken up with ing meeting was over. Angeline Foskett, too, bout that time. Some one had opened the I don't deny she was pretty looking with

"Curls are well enough," said her in up to the corner where husband, "but they aren't very suba group of women were stantial to get married on. She didn't

"I heard to-day that Mr. Johnson was married," began Daniel, after a pause. Mr. Johnson was the Baptist minister.

"Land sakes, Dan'l! Who to?" " A girl from the factory at Crawford, so they say. It may not be so." Nancy knit energetically to the middle

of her needle. "Well, she may be a nice enough girl, but I'd hate to board at their house," she declared. "Oh, I dun know," replied the more lenient Daniel. "She may do better'n

we think." "She won't, it ain't likely. I pity the poor man. Ministers ought to be well

fed, to keep up, so's not to grow spindlin'. They run more to brains. "It isn't everyone that's got your knack of cooking," said Daniel.

"Well, you was always a good pervider, Dan'l. It makes a sight of differ'nce."

"It ain't altogether that," continued Daniel, now waxing argumentative. "You wan't never put to it if comp'ny come unexpected. You could get up a Nancy had been pretty sick; he knew tasty meal out of anything. It's a knack, that well enough—hadn't he taken care 's I hold it—equal to the best. I haven't of her? Anybody else might have got forgot the first meal I had to your house. Seems 's if nothing ever tasted so good, weathered it as she had weathered every- hardly, as those flapjacks. You was in thing that had come along-she was a pink calico-I can see you just as you was then. You had a rose in your hair.

"You don't say you remember that it meant. dress? I've got a piece of it in a bed quilt now," said Nancy.

One night, when he had driven over "I thought it was about time for you, for the mail, he took a package from his Dan'l," said his wife, as he opened the pocket. "And here's something for sitting-room door. She was looking up you." If he had been a young man, making his first present to his lady love, Daniel could hardly have felt more room swim before his eyes, it was not her awkward about it. He began to untwist face that he saw, it was Nancy, the wife | the ends of the small tissue paper parcel, but abandoned the attempt, and placed

"Why, Dan'i! Oh! why, Dan'l! How handsome 'tis!" It was a necktie of pale lavender silk. with very soft, thick fringe.

"If 'tain't right, we can change it." Daniel was anxiously rubbing his knee. "I guess it is right; it's a beauty. How come you to?"

"I happened to think of it when I was in t' the store, an' I went across where they keep 'em. The girl come right toward me-I know who she was-she rheumatic hands as they plied the yarn | was one of Si Andrews's girls, over t' the Corners. Says I, 'I want to see the "I wouldn't do any more to-night, right thing for a lady with white hair." 'Oh, for your wife?' says she—she's a 'll be wanting to see how her grandquick spoken girl-an' she showed me mother looks.' this one. 'I know this will be right, she says, 'for I've seen her wear the same color on her bonnets, and it's very be-

"You're a great one, Dan'l." His wife laughed, though still with round, shocked eyes. She laid the tie over her some at the store, if worst comes to knee, and then held it up to the light. worst," suggested Daniel, with a faint- "It'll be beautiful on my black silkthe waist's plainer'n they make 'em now.' No other thanks were said, and Daniel

was not conscious of needing any. "What you say to driving over t' the church sociable to-night?" was Daniel's trembling hand. The letters on the inquiry, a few nights later, just as Nancy had finished her work and drawn out her rocking chair. "I do' know as we get out often enough. It's good sleighin', an' we can't count on that very long.'

Nancy finally decided to go, and put her head out of the bed room door a moment later. "Don't look like snow, does it?" she asked. Daniel shook his head. "I guest I'll wear my new bonnet," she said.

When she appeared in her new bonnet and the black silk with the lavender tie, Daniel privately thought her a very handsome old lady. "Got enough on?"

"Why, yes, I guess so." "No, you haven't." Daniel brought a shawl he had warmed at the stove, and wrapped it around her. "I ain't going to take any girl riding an' have her ketch cold." He stooped down to button her long cloak over it. "I don't have rheum'tiz," he explained, while Nancy, had said again, "I wouldn't do too much in her turn, pulled the bow of his cravat out carefully.

The air was so crisp and cold, and the starry sky so clear that the old couple felt a youthful tingle of exhilaration at to handy." It was her way of saying the thought of the two-mile drive. Daniel carefully helped his wife in and As they sat before the stove in the tucked the robes about her. "Feels comf'table," she mumbled through her ners of his mouth, and he dropped the vail and the muff she was holding against back of his hand upon his knee with a her face; and Daniel took hold of her hand a moment, pretending to arrange

"It sort o' chirks a person up to be amongst folks," said Nancy, on the way home. "I was always fond of goin'. An' we seem to enjoy it more than some. You remember the time I come up to D'you notice how John Sheldon an' his you after singing-school and asked if I wife stayed tight together the whole evening. Well, now, what good 'd they sir, I can see myself home!' an' walked get out of goin'? You want to mix up with other folks more, an' then you have something differ'nt to tell when you get

"Why, yes, that's the way."

"They'd have to be queer to be "P-s-h-h!" said his wife, giving his with bolience to each tree.

Daniel made no pretense of arranging the robe.

Whether these husbandly attentions acted as a tonic it is impossible to say but, as the Winter advanced and the snow still lay rugged and broken, but without melting, on either side of the roads, some of Nancy's energy seemed to come back. Now, again, her old ways claimed her. Daniel coming in from the barn one bleak afternoon was made pleasantly conscious of the odor of waffles before he opened the kitchen door. "So this is what you've been up to, is it?" he inquired, with a sniff of anticipation.

"It seemed, as you might say, a good day for waffles," answered Nancy. "Why didn't you tell me you was going to have 'em? I could have

helped you." "Oh, I thought they'd taste better as su'prise."

Daniel washed his face and hands at the sink, and held the towel far from him upon his outstretched hands, as a man's way is. He looked around the room. Since Nancy had grown so fee-ble they had taken their Winter meals in the kitchen. The table was primly laid, with preserved peaches and shaved dried beef. Nancy, with a white apron tied about her waist, was hovering near. With the impulse which came to him at the moment, Daniel bent over and spoke in her better ear-for this was not a

thing to be said twice over: "Nancy, you know you ain't give me kiss this ever so long?"

Nancy had the waffle platter poised upon her hands. She stopped. You ain't asked me, have you?" said she, glancing over her shoulder at him with a spice of her old coquetry.

"Well, has a man got to ask his wife every time after he's lived with her mor'n 40 years?"

"Why no, not as I know of." She tapped her foot upon the ground, as she might have done 40 years before. There was a soft flush upon her old New England cheek. Daniel kissed the pinkest place, and she reached up to his other cheek and gave it a quick little peck There! go 'long with you!" she said. Bless God for my husband!" was what

Later on there came a stretch of beautiful days, cold indeed, but not with the deadening cold of December. "Well, who'd you see up to town?" was Nancy's question as Daniel came in at dusk. She shut her book over her spectacles in an ticipation of the gossip which Daniel had grown in the habit of bringing home, but as he only answered, "Oh, nobody in particular," she looked for her place again, a little disappointed.

Daniel set his boots upon the foot-stool to dry, and thrust his feet into the slippers Nancy had warmed for him. "Let's see-when'd we hear from John last?" he asked, presently, in a reflective tone. "Two weeks ago, come Sat'day," was

Nancy's reply.
"I've been thinking—what's to hinder about that visit they was talking of? You know they wanted you to come for Christmas, but twa'n't so't you could."

Nancy put on her spectacles and then ook them off again, bewildered. "I'm fixed to spare the money now," he went on; "an' a little trip will likely do you good. That namesake of yours

Nancy's heart gave a great bound at the thought of the grandchild she had never seen, little Nan, whom she longed to have upon her knee; but she said,

hesitatingly-" But, Dan'l"-"You're fixed to go, ain't you? Never heard of a woman that was ready to start

off anywhere!" "Yes, I'm so I could go-though there's things I ought to have if I was going-but I can't leave you, Dan'l. We're getting old folks. You wouldn't

get along." "I guess I can get Marindy Peters to come an' cook for me, suggested Daniel, with a jocose twinkle in his eye, as though all had not been told yet.

"Well, I'd be dreadful hard put to it b'fore I'd let you eat Marindy Peters' cookin'," said his wife with decision: 'shit'less, meachin' cretur enough. B'sides, how'd I ever get there?

"It's easy gettin' to Buffalo. Put you right on board a sleeper"-

"Yes, an' I shouldn't sleep enough to pay for my ticket; I should be so afraid they'd put a man over my head." No, Dan'l, it's real kind in you to think of it, but I can't go off so far an' leave you -I can't noway!" She had risen, and was agitatedly brushing the top of the stove with a turkey wing, though there were no ashes on it.

Daniel drew a ponderous breath; his little surprise was even more enjoyable than he had anticipated. "I haven't said I was goin' to be left yet," he remarked, slowly.

"Why, Dan'l! you don't mean?"-"I don't propose to let you get lost alone in that sleeper—that'd never do any way in the world. I guess we can manage to get there together, eh? What you s'pose the boy'll say to see us come "Twill be a sort o' bridal trip, won't

The old man was looking at her with deep wells of tenderness in his eyes. Nancy made a step toward him, and put her hand up to his coat, as if to brush away invisible dust. Suddenly his arms closed around her, and held her. He kissed her bent head and cleared his throat, patting her worn back gently. 'I got a good wife when I got ye, Nanny," was what he said at last.

His wife did not answer. She leaned against him and slowly stroked his shoulder up and down with one tremulous hand. She was crying .- Worthington's Magazine.

When you burn up trimmings and other rubbish, give the ashes to the trees. Where wood ashes are obtainable, they "Well, now, I can tell you that used to make me jealous," said Daniel.

"P-s-h-h!" said his wife, giving his with bonemeal, five to ten pounds each tree.



ENIGMANIA-NO. 1.

NO. 1-DECAPITATION. When you kissed me, Chloris, dear, Lifting up your flower-face
(Crimson-flushed from throat to ear)
With a shy and artless grace, Heaven to earth was very near-When you kissed me, Chloris, dear,

When your white ONES drew me down, Softly clasping round my neck, Not a king for all his crown Could the half of my joy reck; I was more than king's compeer When you kissed me, Chloris, dear. How you trembled at it, sweet, Half ashamed to do so much,

How your WHOLE breast madly beat Gainst my own at our lips' touch Both your bright eyes held a tear When you kissed me, Chloris, dear. How the blood within me thrilled As I drank your lips' sweet wine How I crushed you and you stilled Close against this heart of mine

Eyes to eyes spoke love so clear Words were needless, Chloris, dear. Ah, my Chloris! years have sped Since that dear, eventful day, Yet do we with lightsome tread Travel down love's rose-strewn way. Life is fair when love is near-Come and kiss me, Chloris, dear! -Guidon, Washington, D. C.

NO. 2-SQUARE. 1. Something that produces extraordinary effect. 2. Advantage.* (W. Switzerland. 4. Served.* bour County, Ala. 6. P. O., Providence County, R. I. 7. Canon of Ravenna and

chronicler. 8. Not requisite.

—Dan. D. Lyon, Irwin, Pa. NO. 3-TRANSPOSAL Within the grove a gipsy ten Camp in their dingy canvas dwelling; They drive a horse-trade now and then,

But mostly deal in fortune-telling. There, for a quarter, you may buy Promise of honors, wealth, and spouses Though country people living nigh,
Discreetly lock their poultry houses.

I watched a girl, whose regal air Her tawdry dress could hardly smothers 'See Cleopatra standing there,' I whispered my prosaic brother. He peered as through a microscope-

No convex lens was ever keener-

"Queen Cleopatra?" Um! I hope Her Majesty was somewhat cleaner:" —M. C. S., Springfield, Ill. NO. 4-HALF SQUARE.

1. A tyrant fly catcher of the Southern U. and Mexico. 2. Hundredth parts of a meter. 3. To overthrow. 4. Producing stamens. 5. Non-metallic elements analogous of carbon. 6. Inauspicious. 7. Works having two parapets. 8. States. (M. and S.) 9. A kind of wig. 10. The unit of superficial -ITAMI, Jersey City, N. J.

NO. 5-TRANSPOSITION. Out on the world of shadows dim Where falls the darkness, drear, There comes an humble evening hymn Unto my listening ear.

A word of praise, a word of prayer The soul does not forget, But through its weight of woe and care Sound PRIMES without regret. What though its lot be sad and tried?

There comes no bitter plaint For with the thoughts of Heav'n beside No earthly murmurs taint. Through misery, through hunger fierce, Through life's most fearful ills,

It still strives on the veil to pierce The way its Maker wills. The lowly serf, the haughty ALL, May both in darkness grope:

But leading, guiding from the fall, There shines the star of hope! -CINDERS, Philadelphia, Pa. NO. 6-SQUARE. (To Iron Mask.)

1. To change from a solid to a fluid condition. (Standard.) 2. A genus of birds, including the chattering fly catcher. (Unab.) 3. A parish of England, County of Northhampton. (Lipp., old Ed.) 4. Town, Coast of Naples. (Worc.) 5. Old World singing hirds of the family Oriolide. 6. A female lion. 7. Any one of the numerous species of butterflies belonging to Vanessa and allied Genera. —Jo Mullins, Miami, Mo.

NO. 7-TERMINAL DELETION. The spider's web shall drape the throne Where once the royal purple shone, And on the city's broken wall The owl, the watching cry shall call.

ONE thou majestic, mighty one, Thy day was bright, thy day is done; A world walked captive in thy train, Thy scattered wrack bestrews the plain. The thunder-tread of marching feet, And palace, temple, colonnade, In one tumultuous ruin laid. Marks ALL thy glory's empty place, The charnel of a vanished rac O, where are now thy heroes bold Whose fame across the world was told? Their pictured pomp adorned the walls; Their ashes dust the grumbling halls! 'Neath yonder high triumphal arch Now naught but glittering shadows march; A grim old figure gauntly stands;
A broken scythe aside is thrown,
An hourglass shattered on the stone, And o'er the city's shriveled corse Stands Time, a figure of remorse! -IRON MASK, Batavia, N. Y.

NO. 8- - DOUBLE HALF-SQUARE. Across: 1. A letter 2 A prefix. 3. A chariot of war. 4. Coffee trees. (Unab.)
5. The world. 6. Marshal of France; 1769
1809. 7. Greatest. 8. Bologuese painter;
1560-1609. 9. A town of Prussia. 10. Concerning. 11. Stupidity. 12. One of a class of poets of the 15th and 16th centuries. Down: 1. A letter. 2. To take. 3. A river of Russia. 4. French translator; 1550. 5. A town of Spain.
6. A lamprey. (Cent.
7. A gift.
8. Italian orientalist; 1612-1700 German soldier of fortune; 1380. 10. Having a close relation, 11. Incandescence.

12. A large dragon fly.

—A. F. Holl, Lynn, Mass.

(Pantoum. - To Salviac.) Star of the sea thy name men call My FINAL of the merry eye; My heart is held in deepest thrall, Thou art the sole star of my sky. My FINAL of the merry eye, Men hoard their PRIMES Thou art the sole star of my sky—
I'd wear my PRIME that all might see!

Men hoard their PRIMES 'neath lock and

key; Deep in some ALL their jewels hide; I'd wear my PRIME that all might see— My peerless LAST thou art my pride! Deep in some ALL their jewels hide,

The miser hearts grown sere with greed; My peerless may thou art my pride, Love is my sole and only creed. The miser hearts grown sere with greed— Love, make for all thy pitying moan—

Love is my sole and only creed— Life's radiant star is love alone! Love, make for all thy pitying moan-Star of the sea thy name men call.

Life's radiant star is Love alone—

My heart is held in deepest thrall!

—BEECH NUT, Newburg, N. Y.

EMOLUMENTS.

EMOLUMENTS.

1. To the person who suggests the most original, novel, and interesting feature for use in this column, a nickel-sliver, open-faced watch, Elgin movement, good timekeeper. See what your brains can evolve?

2. For the diamond, square or half-square containing the most letter O's, a handsome gold pen and gold-mounted holder.

3. For the best diamond, square or half-square, centered or based on the nom-de-plume of some well-known puzzler, "Dream of the Ages." by Kute Brownlee Sherwood, beautifully bound.

4. For the best verse puzzle, to be closely restricted to the theme "Summer," a handsome gold pen and gold-mounted lyary holder.

5. For the best ballade or rondeau, "Dream of the Ages."

6-7. For the best lot of answers to Enigmania, Nos. 1, 2, and 3, and for-meatest list of 12 or more answers to same, a 440-page bound book each.

CONDITIONS.

CONDITIONS.

In awarding prizes 2 and 3, size of form and number of pure Websterian words will be considered; also, accuracy with which definitions are given, even to the *. Competitory verse puzzles must not exceed 22 lines in length. Only one puzzle can be entered by any contestant for any prize, but one entry for each number will be allowed. All contributions must be marked "Entered for Prize," and must reach us prior to June 15. Neatness of lists will not be overlooked in the award of No. 6, and wordforms should not be abbreviated. All classes open to subscribers. Do not send six-months subscriptions.

ENIGMIANA.

"The Enigma" makes its bow to the readers of this paper and the little puzzle world on the same day that "General" Coxey has chosen for making his triumphal bow be fore the Congress of the United States and the residents of Washington. Coxey has planned great crusade (to his own thinking, at east); it has been widely heralded, and he expects to accomplish great results. Unlike him, we come before you determined upon no plan except to strive to interest the hundreds who enjoy a leisure hour with a problem; un-heralded, and with no hopes of revolutionizing anything. We shall simply aim to entertain and instruct lovers of enigmatography, by placing before them semi-monthly such a choice set-out of contributed matter that it must prove relishable to all. If you will take a kindly interest in it, "The Enigma" will immediately take and maintain a leading position among puzzle columns.is a man of clever ideas and No. 1 is characteristic of him; No. 7, also, is in that peculiar strain which has made its author a rea favorite. It goes without saying that verses by M. C. S. will never disappoint one, and as for Cinders and Beech Nut, they hold their own, which is as much as need be said. Puzzles from the pen of Jo Mullins are any thing but plentiful now-a-days, unless it be in *The Lucubrator* office. Jo's base-word has been squared before, but his combination is new and neat. Our other formists perform admirably their respective parts in adding to the attractiveness of this issue. It may not be out of place to here say a few words concerning contributions: We shall endeavor with "The Enigma" to steer clear as far as possible of the usual channel into which puzzle de-partments drift and shall also take pride in presenting the cream of our puzzlers' work, and that only, to the end that each issue may be representative of the best flats and forms credit of selecting the several titles above. It has been further suggested that solvers of Enigmania should be called Enigmaniacs.

From remarks in the current Study it is to be inferred that Dorothy Doolittle does not look with favor upon the idea of following in the footsteps of Dick Graver, as was suggested to her. —Thedom No. 40 is a veritable mine of puzzleistic good things. Delightsome verses by A. L. S. and Kennick. that Puzzledom is producing. "If you see it here, it's good."—To Lucile belongs the credit of selecting the several titles above. It has been further suggested that solvers of puzzleistic good things. Delightsome verses by A. L. S. and Koscinsko McGinty, and a

plete files, but it is seldom we are able to furnish them. Do you grasp the idea?
5-1-'94. R. O. Chester. THE AMERICAN FARMER and The National Tribune both one year

quare on ASSAMARS, by Elbert, are notable

eatures. ——In a letter recently received from

Stocles the writer requests us to charge the

dryness of the epistle to the fact that his town

has just gone "no license."- Each week

are received from subscribers to "Mystery"

one to three requests for back numbers of that

column, in order that they may obtain com-

Wool.

BOSTON, April 28.—The wool market shows ery little change. A good trade was noted the atter part of last week, since which the demand has been lighter. We quote the selling prices of the market for

We quote the selling prices of the mar	ket for
leading descriptions as follows:	
	Cents.
Ohio and Pennsylvania No. 1 fleece	22 a24
Ohio and Ponnaylvania No. 1 necco	20 a21
Ohio and Pennsylvania XOhio and Pennsylvania XX	21 a22
Ohio and Pennsylvania AA	22 a23
Ohio and Pennsylvania XX and above	18ia19
Michigan X	22 8
Michigan, No. 1	24 a25
Combing, No. 1	23 a24
Combing, No. 2	20 a22
Kentucky and Ind. 1-blood combing	19 a21
Kentucky and Ind. I-blood combing	18 al9
Missouri i-blood combing	19 a20
Missouri 1-blood combing	
Delaine, Ohio fine	23 a24
Delaine, Michigan fine	22 a23
Montana fine	10 a14
Montana medium	12 a15
Wyoming fine	9 al2
Wyoming medium	12 a15
Kansas and Nebraska fine	8 a12
Kansas and Nebraska medium	10 a13
Georgia	17 al8
Texas Spring medium, 12 mos	10 a13
Texas Spring fine, 12 mos	12 a14
Texas Spring fine, 6 to 8 mos	11 a13
Texas Spring fine, 6 to 8 mos	12 a13
Powas Fall	8 al2
Kentucky 1-blood clothing	15 al7
Kentucky 1-blood clothing	18 a19
Unwashed fine Ohio and Michigan	13 a15
Unmerchantable Ohio	16 al7
Unmerchantable Michigan	14 al5
Lambs super pulled	20 a22
Super pulled	18 a22
Extra pulled	15 a20
Western super	15 a20
California Spring	9 a15
California Fall	8 a10
Oregon east	9 al3
Oregon fancy	12 a18
Oregon fine valley	11 a15
Oregon medium valley	15 a17
Montevideo	27 a28
Australian and New Zealand	28 485
	101 00

Cotton. NEW YORK, April 28.-The following show Op'g. High. Low. 7.16 7.17 7.16 7.29 7.29 7.22 7.35 7.36 7.26 7.30 7.30 7.31

Cheapest Lands in the World

considering the quick cultivation, varied productions of high quality, and practically no time from the great markets of Chicago, Mil-

THE MARKETS.

Review of the Fortnight.

Cotton-The bulls say-receipts are behind the 1889-'90 crop to date, with no reason to expect over 7,250,000 bales. Consumption in Europe, especially on the Continent, is unusually large. That the visible supply Sept. 1 will likely be 500,000 bales less than Sept. 1, 1893. Invisible stocks everywhere are light. The new crop is having a late start, and a crop of 8,250,000 to 8,500,000 is needed to supply consumptive demands. The price is only 10 per cent, above the lowest for 50 years past. Summer months delivery are apparently oversold.

Bears claim large receipts completely upset all the small crop theories; that 161,621 bales received the first 20 days in April against 117,879 for the whole month of April, 1890, is no bull argument. The 1889-'90 crop was 7,313,726 bales. The visible supply is now 127,081 bales larger than a year ago; prices about the same and trade worse. The largest mill in New England, using 1,000 bales per week, has cut down production about onehalf. Liverpool has supply enough to meet English wants and leave Sept. 1, 1894, a larger stock than in 1890; that preparations are being made to soon sell at auction the largest stock of cotton goods ever offered and that general trade is not what it is cracked up e, and that the "object lesson" is still on, and until Washington changes her "colors" no good will result to planter, factor, spinner, banker, or farmer. That the new crop will have increased acreage in Texas, where more than a quarter of the American crop is grown.

The cotton market appears low enough to encourage investment buying.

Wheat—The export movement continues liberal and above either a five or a ten year average. The primary movement has been less than usual, not exceeding expectations of many grain merchants or local traders. ter wheat farmers seem willing sellers, indicating they perceive little reason to hold, and that the growing crop promises a fair average. Spring seeding has doubtless proed as well as usual. Some localities re port increased acreage, many basing their reasons on general principles that only wheat can be grown. Pacific Coast reports may be recorded with a grain of allowance because of the speculative furore in San Francisco. The amount affoat continues to increase and has now reached nearly a maximum amount. Large Russian, Indian, and Australian shipments seem to place a wet blanket on the bull sentiment which recently caused the sharp advance and pyramid building, leaving the bears in complete control of the market, which they claim is depressed because one-third of the visible supply is at the world's leading speculative market. England now claims they want only about 5,000,000 bushels weekly (to mix with wheats already bought)

to supply them until a new crop is offered them by all exporting Nations.

Wheat is low and around the low point since exchanges were established. We look for encouraging news from Washington ere long, believing it is but a question of time when legislation and speculation will favor inreasing rather than further depressing values, believing it is the producer's turn to have an inning, rather than further aid only the con-

sumers and their allies. Corn—The movement from first hands is falling off. The visible is decreasing. Farmers are busy and are not likely to sell freely. The New Eugland and export demand is good and not likely to fall off. Prices are around the low point for years, and speculative bears plenty; therefore, on general principles, we prefer buying rather than longer look for a further decline in values.

Produce.

State dairy, new, nair-nrkin tubs, choice,
per pound 17‡a18‡
State dairy, old firkins, per pound 11 al6
Welsh tubs, fair to prime, per pound 16 a174
Eastern- creamery, new, choice, per
pound
Pennsylvania creamery, new, fancy, per
Elgin creamery, fancy, per pound 204a21
Western creamery, choice, per pound., 19 a194
Western dairy, choice, per pound 13 al4
Imitation creamery, fair to good, per
pound 12 a14
Factory, old, per pound 10 al2
Beans and Peas—There is a fair demand for domestic marrows and mediums, and pea beans are firmer. Kidneys and Limas are also firmer. Green peas are quiet. We quote:
Beans, marrow, fair to good \$2 00 a\$2 30
Beans, medium, choice a 1 70
Beans, pea, choice a 1 80
Beans, kidney, fair to good 1 75 a 1 85
Beans, black turtle soup 1 90 a 2 00
Beans, yellow eye 1 80 a 1 85
Beans, Lima, California, per 60
pounds 2 20 a 2 25
Green peas, barrel, per bushel a 1 10
Green peas, Scotch, per bushel 1 25 a 1 274

Cheese—There is a good demand for old cheese, and prices are very firm. Receipts of new cheese are not large, and with a fair demand by exporters prices are firmly maintained, especially on large colored cheese. Part skims are rather scarce, and prices are quite steady. We quote: We quote: State factory, Fall made, white, fancy, 111a 12 9}a10}

Western, coloreu, shaan, hatter, pound.

Dried Fruits and Nuts—Evaporated apples are scarce and have gone up in price. Sun-dried apples and peaches are also firmer. Choice cherries are steady. Raspberries are scarce. Peanuts are firmer. Hickory nuts and pecans are dull. We quote: are dull. We quote:

Apples, evaporated, choice, per pound. 12 a12;
Apples, evaporated, ordinary to good,
per pound. 9 a11;
Apples, sun-dried, per pound. 5 a 7;
Peaches, North Carolina, peeled, per
pound. 8 a11
Peaches, Delaware, evaporated, peeled,
new, per pound. 13 a16 Eggs—Are plentiful and low, and most of the demand is for fine grades. The market opened weak to-day, but became stronger later in the day on advices that eggs were being stored in the West, and that abipments would not be very large. Duck and goose eggs are quiet. We counter.

rries, North Carolina, large, other grades. Straw is steady. We quote:
Hay, No. 1, per 100 pounds.
Hay, No. 3, per 100 pounds.
Hay, No. 3, per 100 pounds.
Hay, clover, per 100 pounds.
Hay, clover, mixed, per 100 pounds.
Hay, shipping, per 100 pounds.
Hay, shipping, per 100 pounds.
Long rye straw, per 100 pounds.
Short rye straw, per 100 pounds.
Out straw, per 100 pounds.
Wheat straw, per 100 pounds.
Poultry and Game. Receipts of live press

LIVE POULTRY. DRESSED POULTRY.

Chickens, Western, broilers, dry-picked, per pound.

Chickens, Western, broilers, scalded per pound.

Chickens, frozen, soft-meated, choice, per pound.

Chickens and fowls, mixed, trozen, fancy, Chickens and fowls, mixed, Lozen, fancy, per pound.

Chickens and fowls, mixed, Western, frozen, choice, per pound.

Chickens and fowls, mixed, Western, good, per pound.

Fowls, Western, dry-picked, large, prime, per pound.

Fowls, Western; scalded, prime, per pound. Fowls, Western, ordinary, per pound... per pound...
Turkeys, Western, frozen, voung toms and hens, mixed, per pound...
Turkeys, Western, frozen, old toms, per pound. pound..... Turkeys, frozen, poor, per pound...... Ducks, Western, frozen, choice, per geese, Western, frozen, choice per

quote : Potatoes, Western, Burbank, prime, \$2 60 a\$2 13 . 4 00 a 5 00 Sweet potatoes, Vineland, fair, per

 barrel
 2 75 a 3 25

 Onions, Bermuda, per crate
 2 15 a

 Onions, red, per barrel
 2 50 a 3 50

 Onions, yellow, per barrel
 2 50 a 3 50

 Cabbage, per bbl crate
 1 00 a 1 25

 Beets, per 100 bunches
 4 00 a 6 00

 Eggplant, prime, per barrel
 5 50 a 6 00

 String beans, Southern, choice, per crate
 2 50 a 3 00

SUNDRIES. Becswax, Southern, pure, per pound Beeswax, Western, pure, per pound. Honey, white clover, one-pound boxes, per pound. Honey, white clover, two-pound Honey, white clover, two-pound boxes, per pound.
Honey, buckwheat, one-pound boxes, per pound.
Honey, buckwheat, two-pound boxes, per pound.
Honey, extracted, Satte, per pound.
Honey, extracted, Southern, per pound.
Honey, extracted, California, per pound.
Maple sugar, prime, per pound.
Maple sirup, prime, per gallon can. 5 a 54

Livestock.

Chicago, April 28.—Cattle—Receipts were fair, and compared with the slim run of the day before were heavy. The five day's receipts were some scarce, and pecans and pecans and least receipts at the four principal Western markets combined for the five days were flowers ago. Receipts at the four principal Western markets combined for the five days were flowers ago. There seemed to be very little reason for the decline of 10a25 from Thursday's early excited prices. Heavy beeves, 1,50a1,500 loss than a year ago. There seemed to be very little reason for the decline of 10a25 from Thursday's early excited prices. Heavy beeves, 1,50a1,600 pounds at 4,10a4,35, showed the most decline. Light 90a1,300 pound steers, of good quality, were in good demand at 3,56a4,25; cows, 1,50a2,35; stockers and feeders, 3a4. Quotations are as follows: ers and feeders, 3a4. Quotations are as follows: or and feeders, 3a4. Quotations are as follows: and feeders, 3a4. Quotations are as follows: Fair to good, 1,10a1,300 lbs. 4 400a 4 400 at 40 Livestock.

Grain. CHICAGO, April 28,—The following show the range of prices:

Open, High, Low.

-57‡ -57‡ -57‡ -57‡
-58‡ -58‡ -57‡
-60 -60 -50 -50
-37‡ -37‡ -37‡
-38 -38‡ -37‡
-39 -39‡ -38‡
-39‡ -39‡
-39‡ -39‡
-39‡ -39‡
-29‡ -29‡
-29‡ -29‡
-21, 30 13, 30 13, 30
-12, 47 12, 47 13, 35
-12, 57 12, 65 12, 45
-7, 35 7, 35 7, 35
-7, 35 7, 35 7, 35
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-7, 3 Open, High, Low, Close,



Yorker.

delphian.

Philadelphia Record.

reading club."

alone myself."

" And Henry?"

the others."-Judge.

A Soft Answer.

do they?" inquired the smart New

"People don't die very often over here,

"No, only once," replied the Phila-

And there was an intense silence.-

Unimportant.

"Yes," said Mrs. Five-o'clock, "the

family are most interesting. John dances

divinely, Tom sings like an angel, David

paints beautifully, and belongs to the

"Oh, Henry! Well, he's rather dull,

Cruel Irony.

on the table, "that's the first mince pie

that I ever made without any help, all

"So it is!" exclaimed her husband

enthusiastically, looking it over critically.

And so long as it is the very first, my

dear, don't you think that, instead of

cutting it, it would be nice to keep it for

Scene, a Philadelphia Church Fair.

Miss Rose Bud-Now, Mr. Coupon

We have home-made doughnuts, wash

cloths, tidies, and aprons. I am sure

Mr. Coupon-O, thanks, awfully;

Miss R. B .- Certainly, \$5 each; how

many will you have?
Mr. J. C. (handing out the money)-

Miss R. B. (with a seraphic smile)

Oh, yes; we are particular about that. Miss Autumn Leaf, will you deliver two

(Miss Autumn Leaf is 40 in the

hade, paralyzingly ugly, and lives in

Mr. J. C .- You are more than kind.

Dobson (turning to his colored valet

who is carrying his parcels), just take

this purchase from Miss Autumn Leaf.

drama is that the fin de siecle young

Unappreciated Humor.

Senator George, of Mississippi,

tor one day walked over

House and proceeded to go by the door-

keepers. One of the guardians, not

knowing the Mississippi statesman, laid

"Here, sir, I say, sir, are you a Rep-

"No, sah," said the Mississippian,

Turner's Tammany appointees, who, brought up in New York City, had cul-

tivated a grim sense of humor, which he

Is not upon the flo', sah; He went home at half-past fo', sah, And won't be back no mo', sah."

A day or two after there was a sud-

den change of doorkeepers at that par-

And the keeper of the do', sah,

Cypress Shingles.

EDITOR AMERICAN FARMER: Do you know

anything about the durability of cypress shin-gles? Do they last longer than pine? I refer

Cypress shingles, especially the split

ones, last very much longer than pine

The builders around Washington esti-

mate that pine shingles will last on an

average five years; sawed cypress from

7 to 12 years, and split cypress indefi-

nitely. The sawed shingles are inferior.

also, in that the saw cuts squarely across

knots and other imperfections, and they

are thus more liable to leak. The usua

price of pine shingles in Washington is

from \$4.50 to \$5; sawed cypress, \$7;

split cypress, \$10. At these prices, the

latter are considered much the cheapest.

WORTH A GUINEA A BOX."

BEECHAMS

SICK HEADACHE,

Disordered Liver, etc.

They Act Like Magic on the Vital Organs, Regulating the Secretions, restoring long lost Complexion, bringing back the Keen Edge of Appetite, and arousing with the ROSEBUD OF HEALTH the whole physical energy of the human frame. These Facts are admitted by thousands, in all classes of Society. Largest Sale in the World.

Covered with a Tasteless & Soluble Coating

Of all druggists. Price 25 cents a Bo New York Depot, 365 Canal St.

-EDITOR AMERICAN FARMER.

North Carolina shingle.—THOMAS J.

- Washington Post.

Was heard of never mo', sah.

"Representative Kilgo', sah,

his hand on his arm and detained him.

resentative?" he called out.

Representative Kilgo', sah!"

promptly replied:

ticular portal.

HILL, Freeport, Pa.

I'll take two, good measure, please.

what are you going to buy at my table

it framed ?"-Somerville Journal.

you want some of each.

kisses to Mr. Coupon?

Camden).

have you any kisses for sale?

souvenir? How would it do to have

Spring Poem BY S. W. FOSS.

The angels pack their Winter clo'es, their clo'es from head to feet—
An' douse perfum'ry on 'em, at's what makes the air so sweet.

The flirtin' heavens they sass the hills ith winds

and gentle showers,
An then the jolly, gigglin' hills they sass right
back 'ith flowers.
The earth whose jints have been so stiff 'ith
frosty roomatis,
Just puts her sunshine plaster on an' goes about

Treaty roomatis,

Just puts her sunshine plaster on an goes about ber bis;

An natur she jest swallers down her tonic of Shakes off the blues, and then resolves to try the thing again. The brook that's been a-grumblin' on way un'er neath the snow, Breaks luto sich a laffin' song it makes the May

flowers grow. An' all the pussy willow buds just rush out in a An' stan' there 'ith their nightcaps on a-listening the song, rooks go peddlin' poetry, the robins strew

brooks go pedulin poets, troun', troun', bobolink jest slings it an' makes the air resoun'; In flower'n lines er crocuses no man should dare to skip, God writes his purtlest poetry on his medder "There!" said the young wife proudly, as she deposited the hot plate carefully

A Sad Mistake.



Miss Fernleaf (showing visitor through conservatory)-Yes; these are our cacti. Papa is so fond of them he spends most of his time among them.

Nearsighted Visitor-Beautiful! And what a peculiarly formed one this is! Do you mind me pulling one of those stickers out?



The Peculiarly Formed One (as he feels the pull)-!** ?? *** ?-

Wayside Repartee.



Cold Callahan—Say, Indy, that there gag yer allus tryin' 'bout bein' a flood rer never seems to work, does it?' Indolent Ivers-Naw; dat's why I like it so well .- Puck.

Not Responsible.

Mother-To think that my little Ethel should have spoken so impertinently to papa to-day at dinner! She never hears me talk that way to him. Ethel (stoutly) — Well, but you choosed him and I didn't.—Brooklyn

What He Rested On.

Willie (just home from school and very much excited)-What do you think, pa? Johnny Smith, one of the big boys, had an argument with the teacher about a question in grammar. His Father-What position did he

Willie-His last position was across the chair, face down. - Truth.

Lacked an Essential.

Mamma-What did you do to entertain the little girl that came to play with you? Lottie-We looked at pictures and

told stories. Mamma-Why didn't you play at

keeping house and visiting? Lottie—We did try, but she didn't know anything mean about the neighbors and we didn't have anything to talk

Forcible Argument.

"Lady, could you give a poor man a cup of coffee?" Mrs. Nuwife-No, breakfast is all

"Well, I'll say this, that I've tramped for two years, and it's the first place that I've smelled genuine, first-class coffee

yet." "Never mind your feet; they don't look muddy. Just sit down here at the table. Do you take cream and sugar?'

THE DAIRY.

The pig is now one of the most value ble allies of the dairyman, and will probably remain so for an indefinite

Scab is sometimes caused by indigestion, and sometimes by ringworm. If the latter, wash thoroughly and paint with tincture of iodine.

The French dairymen will not have any other than the Holland or Dutch cow. These are rapidly displacing the former favorites—the Normandy and

Milk is most likely tainted by the air the cow breathes, rather than by the food she eats. In other words, if you have clean, sweet stables, you can feed turnips, etc., without danger.

The Hollanders have simply two breeds of cows—the large and small—the difference being solely due to difference in soils, the large being raised on rich, strong lands, and the small on the is a famous football player, and Susanne | poorer.

No one can say which is the more important, good breeding or good feeding, except that the best breeds can frequently get along better on poor feeds than scrubs can; but, again, a well-fed you know. He only works and supports scrub is frequently better than a poorlyfed thoroughbred.

When the milk is strained I want each crock or pan with the day of the month and the figures 1 or 2 to distinguish between the mornings' and nights' setting. Thus, on the second of the month in the morning it would be 2-1, and at night 2-2. In this way the age of each pan can be told at a glance. A bit of chalk or laundry starch makes a mark which can be easily removed by washing.

Prof. Wohl, of the Wisconsin Experiment Station, gives as an exhibition of what can be done by careful feeding, etc., the results obtained from a herd of Holstein-Friesians. The average time of milking for the herd of 51 cows was 330 days, the lowest milking 225 days. The average yield of milk for the year per head was 8,292 pounds, and of butter fat 271.2 pounds; the highest yield of any single cow was 11,751 pounds of milk and 382.6 pounds of butter fat; the lowest yield, 4,788 pounds of milk and 147.0 pounds of butter fat. The smallest quantity of milk and next to the smallest quantity of fat was yielded by the cow giving milk only 225 days.

Rules for the Dairy.

1. Cow sheds should receive regular and thorough cleaning every morning. Refuse carried out to the manure heap; stall well cleaned with farm hoe, afterward brushed; channel brushed and washed out well; clean bedding laid down; feeding trough always cleaned Curtain-The moral of this little out previous to feeding time; warmth of shed attended to, and no drafts of cold air allowed.

man from New York rarely gets left, even at a Philadelphia church fair.— 2. Ventilation of cow shed should have particular attention every morning; after the shed is cleaned out, open top and bottom of window.

nearly every one knows, speaks with a 3. Cows well cleaned with the curry broad Southern accent. Just after the comb and brush each morning. organization of the 52d Congress the 4. The cow's teats cleaned before

5. Milk should have particular attention in straining it.

6. Rooms containing cream and milk, also milk pans, require careful attention; washing and keeping clean of room and milk vessels well attended to; the room also kept well ventilated; no bad air allowed.

gravely, "I am a member, sah, of the United States Senate, and I wish to see 7. Churns kept well cleaned; always washed out clean previous to working This doorkeeper was one of Iceman

8. Temperature of cream previous to churning carefully attended to; for the purpose have a thermometer 65 degrees was in the habit of exploiting at the ex-Fahrenheit in Summer and a few degrees pense of men with idiosyncracies. He higher in Winter. 9. All dairy utensils kept perfectly

clean and also in a room for themselves.

10. No dairy utensils should be washed inside a dairy; have a small wooden trough outside the dairy for this pur-

11. Keep the floor inside the working compartment perfectly clean; no milk or other liquid allowed to remain on

12. Attend to the washing of the milk from the butter with great attention.

13. The hands not allowed to come in contact with the butter while making. 14. Butter not made up for final use after salting, until a short period of time

elapses; also, butter should not be worked too much. Use small wooden spades for working the butter throughout entire process.

15. Neatness observed in making up of butter.

16. All dairy vessels employed for making purposes kept strictly clean. 17.

Working dairy compartments should be well cleaned—floor, benches at end of week; also exterior portion of dairy well cleaned. No water allowed to remain in channels outside the dairy. 18. Have no decayed refuse near the

dairy on any account. 19. Feeding of milk cows carefully attended to. Food should be clean, fresh, and at regulated periods given. 20. A moderate supply of salt (rock)

very beneficial for your cows. Place lumps of salt in the feeding trough. 21. The drinking water for your cows should be perfectly clean; also the vessels.—Dairy World, London.

Proper Temperature to Churn.

The temperature at which best results are obtained vary somewhat, first, with the season, being higher in Winter than in Summer; second, with the kind of foods given the cows, and, third, in different dairies where difference in handling the cream may affect the churning conditions. In Winter, where cows are

far advanced in lactation and consider able cotton seed or cotton seed meal is fed, as high as 70 degrees F., or possibly two or three higher, may be found desirable. In Summer, with fresh cows on good pasture, as closes to 60 degrees F. as possible will not be far wrong for the same dairy. Each one must establish its best degree of heat or coolness by actual trials. Too much care cannot be bestowed on the proper ripening of the cream, unless you charn more for rich buttermilk than butter.

A Balanced Ration.

The following formula presents a fairly well-balanced ration for medium-sized cows, when compared with American

1234 lbs. timothy hay... .38 1234 lbs. clover hay... .81 8 lbs. bran..... 1.01 13.38 2.30 For Winter feeding this formula shows a deficiency in fat, and a little oilmeal

Of course, cornmeal or corn and cobmeal can be added, or substituted in part for bran, especially if clover pre-dominates in the hay.—Hoard's Dairy-

or ground flaxseed would be an excel-

Diversified Fruit Raising.

EDITOR AMERICAN FARMER: In the general cry that is going up all over the country in regard to the killing of peach and other fruits is a lesson to the person intending planting fruit the coming season, and that ought to teach us that we must not depend on any one kind of fruit, but plant all kinds suitable to our climate and location. We shall never lose everything, and then when the killing cold approaches we can rest assured of some income from that source. The first that comes is the strawberry. A sufficient quantity of ground should be planted to this queen of fruits in its fresh state, to pay at least for the ground in use, and also for the cultivation exclusive of home use. A good way is to plant one foot apart in the row, and the rows four feet apart. Any good, moist soil is right, but we have the best success on clover sod. The first season clean cultivation should be given until late in the Fall, when a light covering of chaffy straw should be placed over and between the rows. The following Spring allow this to remain till after fruiting, which serves for moisture and also to keep the berries free from grit. After the fruit is gathered remove the mulch and give clean cultivation the balance of season until Fall, when repeat mulching. A plantation of strawberries will not be at its best after the third year, when a new one may be set.

Of many methods we have tried, the foregoing is the easiest and best in our location. Of varieties there are many but we think the best, flavor, color, and carrying qualities considered, are found in the Haverland, Bubach, Wilson, Albany, and Cumberland. These four varieties will be found very satisfactory. and should be in every collection.

Raspberries should never fail to be planted, as well for home use as for market. Set black raspberries four feet apart in rows, rows six feet apart, on any good soil. The better the soil the larger and better the berry. The first year cultivate thoroughly. Bear in mind that fruit to give good satisfaction must be kept as clean as corn. This applies to all fruit, with the possible exception of cherries. Cut the canes back in the Spring, and cultivate the same as before. After fruiting cut the old canes out and keep the ground stirred and mellow. I do not know of any fruit which gives such rich returns for the labor bestowed

as the black raspberry.

In planting the red raspberry, care should be taken that the ground is made rich. Plants should be placed two feet apart in the rows, and rows six feet apart, and kept clean as possible. The canes should be cut back every Spring, or the ends nipped off. After fruiting keep clean, but do not cultivate as late in the Fall as the black ones, as this might induce a sappy growth of the canes, and would be more liable to Winter kill. Of varieties there are many, and for black. Mammoth Cluster and Gregg are the best with us, and red Marlboro for early and Cuthbert for main crop.—Mrs. M. Day, Francisco,

Artichokes.

Paper read by Mr. C. P. Hauger at the Greene County Farmers' Institute, held at Paton, Iowa, Feb. 13 and 14, 1894.

I spent several years studying artichokes in the papers and seed catalogs; I also asked people who would be likely to know about them. Now, artichoke literature is just the same that it was 10 years ago, only the yield per acre is now 1,000 bushels; then it was 500 per acre is now 1,000 bushels; then it was soo or 600. Everybody said they would give more food for hogs to the acre than anything else you could plant, and the pigs would en-joy digging them, and a piece of ground planted to artichokes would be a perpetual hog pasture. Some recommended them as a planted to artichokes would be a perpetual hog pasture. Some recommended them as a sure preventive of hog pholera. I sent for a peck of artichokes, which I cut and planted just as though they were potatoes; land was rich and gave good entitivation. The next Spring I dug six hills and got a common pail full. I figured on the wield and thought I had an average of nearly 500 bushels. I then dug some of them and took them to my hogs to see if they would eat them. The old sow recognized them on the first smell. The next recognized them on the first smell. The next year I planted a quarter of an acre of good land and took care of them. In the Fall I turned 40 head of shoats on it for two months. These hogs grew and fatted well, and so far I was satisfied. Why don't the farmers raise more of them for their hogs? What artifor seed for the next crop. The frost would not hurt them, they were safe, and you need not bother yourself about it; just let it alone just see that you raise pigs enough to eat that 1,000-bushel-per-acre crop of medicated anti-cholera stock food. I am satisfied that by planting every year and cultivating well, large quantities of them can be raised. The hogs will dig them. Can you get rid of them millet or Hungarian grass and you will kill nearly all them.

THE AMERICAN FARMER is only 50

THE SCALE INSECT.

generations. The young louse is an active, crawling creature, very minute and yellowish in color. The young spread out upon the new growth of the tree, settle down, and each begins to secrete a scale. During its traveling stage it possesses the characters shown at Fig. 3. The male is an active, twowinged insect, and is shown at Fig. 4. The full-grown female loses her legs and antennæ, and bears a very slight resem-blance to a living insect. In this stage the species is shown at Fig. 5.

The insect affects not only the young twigs and limbs, and, with young trees, the entire plant, but is also found upon the leaves and upon the fruit. When abundant the fruit is destroyed. One of the most characteristic points in the appearance of the insect upon fruit is the



purple discoloration around the edge of each scale. So far as we know this result is confined to this one scale insect. An infested pear is shown at Fig. 1a. Upon the leaves the insects have a tendency to collect along the midrib on the upper side of the leaf, in one or more quite regular rows, and also to some extent along the side ribs. The infested leaves turn brown, but do not have a tendency to fall as a result of the damage.

HOW THE INSECT SPREADS. Aside from the transportation of the insect upon nursery stock, it may be carried upon fruit sent to market. These are its principal modes of travel from one part of the country to another. In orchards and in neighborhoods its spread is in the newly hatched condition only. The female is wingless and after once becoming fixed cannot move: the male alone is winged. The young lice, as before stated, are active, and crawl with considerable rapidity and great persistence, so that they may descend from one tree and crawl for a number of yards to another tree. The spread in this manner, however, is comparatively insignificant. Strong winds may carry the young bodily from one tree to another. but the principal method of spread of these young lice is by means of other in-sects which are winged, and by birds. The active young lice will soon crawl upon a small winged insect, particularly if the latter is of a dark color, and are carried by it to considerable distances. The young lice also crawl upon the feet of birds which visit the tree and may thus be carried for miles. They are often found crawling upon ants, and ants, as everyone knows, are great

REMEDIES. Where trees are found to have become badly infested the safest and, in emulsion is one of the small hand pumps valuable to the Homeseeker, Investors, e long run, the most economical course will be to cut them down and burn them, trunk and branch. Where the infestation is less marked, insecticide washes and sprays may be used. The young lice, before they have begun to secrete scales (and at this time they can only be discovered with the help of a magnifying glass), may be destroyed by spraying with kerosene soap emulsion. A formula for this mixture follows:

Heat the solution of soap and add it boiling hot to the kerosene; churn the mixture by means of a force pump and spray nozzle for five or ten minutes. The emulsion, if perfect, forms a cream which thickens upon cooling, and should adhere without oiliness to the surface of glass. If the water from the soil is hard, or has



Fig. 5.—San Jose Scale: c, adult female containing young—greatly enlarged; d, anal fringe of same—still more enlarged. (Original.)

large percentage of lime, add a little lye or bicarbonate of soda, or else use rain water. For use against scale insects dilute one part of the emulsion with nine parts of cold water.

For the older scales, the washes may be divided into those which can be used in Summer without damage to the trees, and those which are so strong that they can only be applied during the Winter season when the tree is dormant. None of the Summer washes are perfectly efficacious, and it is doubtful whether any of them will prove of more benefit



rest. We Challenge the Merchant and we was seen as \$15 with your hanker or Merchant and we was seen as \$150 to \$2000, ORGANS, \$25 up; PIANOS, \$150 to \$2000, ORGANS, \$25 up; PIANOS, \$150 to \$2000, The Old Reliable MARCHAL & SMITH PIANO CO. Established 1859.

When writing mention this paper.

In California, however, one of our agents, Mr. D. W. Coquillett, has used with sucwhich was made in the following pro-

It is probable that this mixture will not be too strong for Eastern trees, since, in general, with other insecticides, the climate of California seems to render trees rather more susceptible to injury than is the case in the East. For a Winter wash the same ingredients may be used in the following proportions:

Resin, pounds. Caustic soda '70 per cent. strength), pounds.. Fish oil, pints... Water sufficient to make gallons... The most favored Winter remedy in California, however, is the lime, salt, and sulphur mixture. This is generally used throughout the State by progressive fruit growers. It consists of-

Unslaked lime, pounds..... Stock salt,

Stock salt,

Water to make gallons.

This wash will do great damage to the trees if applied during the growing season, and should be used only in Winter. All the sulphur and half the lime are placed in a kettle and 81 gallons water added, after which the contents of the kettle are boiled briskly for about an hour. The solution, which at first is yellow from the sulphur, will turn very dark brown, assuming more or less of a reddish tint, and will finally change from a thick batter to a thoroughly liquid condition, the product being ordinary sulphide of lime. All the sulphur is added to the remaining five pounds of lime and the latter slaked, after which the slaked lime and salt are added to the sulphide of lime already obtained, the whole being then diluted with water to make 15 gallons. This should be strained before application, as it does not form a perfect liquid solution, on account of the considerable quantity of undissolved lime, which will soon settle to the bottom unless the solution is constantly stirred while being sprayed.

In the experience of the Division in California and Washington this solution has not been as successful as could be desired, but it has considerable popularity among the fruit growers of California.

Insecticide Apparatus.—For the makare manufactured by all pump-makers, the Johnson type being preferable. For the application of sprays to trees either the knapsack pumps for small trees and young orchards and nursery stock, or the larger cart or barrel pumps, will be desirable. The aquapult or hydronet can be obtained for about \$9 and the knapsack pumps for about \$15. The larger barrel and tank pumps, when arranged ready for use, range in price from \$25 to \$75, depending on the size and complexity of the machinery.

A very satisfactory apparatus can be made at much less cost by buying a good force pump at a cost of \$9 to \$12, and fixing it to a strong barrel or wooden tank. All the pump manufacturers have pumps that are adapted to this purpose, and the cost of the apparatus by this means will be limited practically to the cost of the pumps, nozzles, and hose, which should not exceed at the outside

The nozzle in most general use is of the Cyclone type, and is ordinarily styled on the market the Vermorel nozzle. This will prove very satisfactory, particularly for smaller trees, and is the one commonly supplied with the knapsack sprayers. The Nixon nozzle, which is supplied only with the Nixon pumps, is a very serviceable one, and particularly advantageous for use with large trees.

HOW TO PREVENT THE SPREAD OF THE INSECT. As we have shown in a previous para-

graph, the principal mode of spread is by

commerce in nursery stock, cuttings and fruit. The time will come in the immediate future when some kind of quarantine regulations will have to be established by States, or by large fruitgrowing districts. Should this species already have obtained the firm foothold in the East which we suspect, New York, Michigan, and other States, in which the pomological interests are great, should mmediately, by act of Legislature, establish quarantine regulations similar to those in force at the present time in the State of California. In the meantime no orchardist should admit a single young fruit tree, or a single cutting, or a single bud, from a distance into his orchard without first carefully examining it and atisfying himself absolutely that it does not carry a single specimen of the San Jose Scale. If this plan is adopted by everyone interested, and without exception, the rate of spread of the species can be limited to the natural spread by crawling, by winds, and by the aid of other insects and birds.

We wish particularly to impress upon the minds of fruit growers that as soon

than the kerosene emulsion just men- as this insect is found to occur in an ortioned. Owing to the fact that we have chard the most strenuous measures must had no Summer experience with this in- be taken to stamp it out. No halfway sect in the East, we cannot state posi- measures will suffice. The individual tively the strengths of certain washes must remember that not only are his own which may be used successfully without interests vitally at stake, but those of the damage to the trees during Summer. entire community in which he resides, Trees badly infested should be instantly burned, as previously stated. The incess during the Summer a resin wash dividual may think that he can not bear the loss, but the loss in consequence of the slightest neglect will be much greater. The fact, too, that there is a community of interests among fruit growers in this matter must not be lost sight of. Fruit growers must be mutually helpful in an emergency like this.

The Gypsy Moth.

The Gypsy Moth Commission of Massachusetts has published a report of 35 pages, with photographic views of Swampscott, where the moth has been sh destructive. After spending 875,000 of the \$100,000 appropriated last year, they have succeeded in clearing a part of the infested region. Another appropriation will probably be granted. The two most effective means of destruction are found to be clearing the land and burning every living thing to starve them out. or "a thorough, scientifically conducted search for, and destruction of, eggs, supplemented by burlapping and hand-killing."



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ing of emulsions and the application of insecticides a good force pump is essential.

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